

OUR RARER BRITISH

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BREEDING BIRDS

THEIR NESTS, EGGS, AND SUMMER HAUNTS

BY

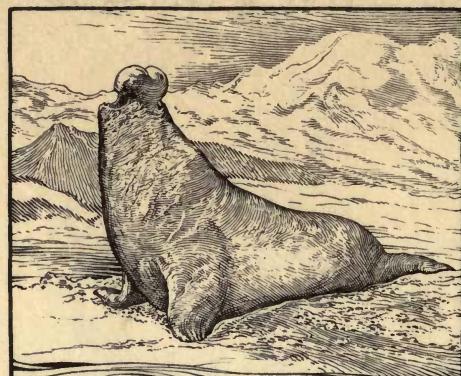
R. KARTON, F.Z.S.

WITH ILLUSTRATIONS
FROM PHOTOGRAPHS

BY G. KARTON

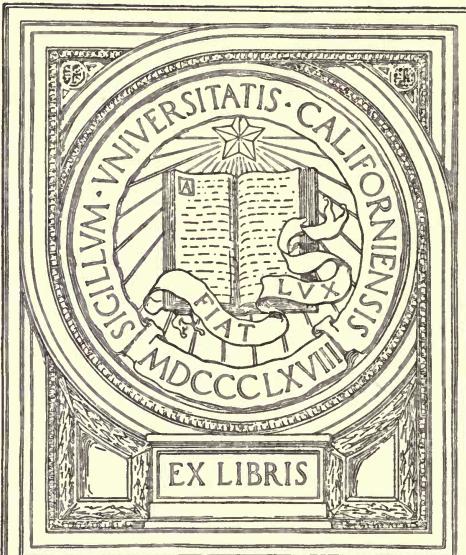


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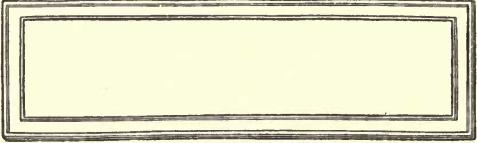
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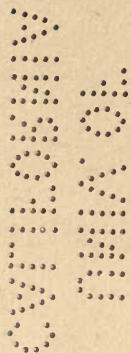
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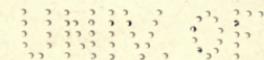
RICHARD KEARTON, F.Z.S.

AUTHOR OF "BRITISH BIRDS' NESTS," "WITH NATURE AND A CAMERA,"
ETC. ETC.

ILLUSTRATED FROM PHOTOGRAPHS

BY

C. KEARTON



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TO MIMU
AUGUST 1963

PREFACE.

THIS little volume is to be regarded as a supplement to our former work on "British Birds' Nests: How, Where, and When to Find and Identify Them," published in 1895. Since that time, my brother and I have missed no opportunity of collecting photographs representing the nests, eggs or breeding-places of such birds as we had not up to that time been fortunate enough to figure by means of the camera, and at the request of a numerous band of ornithological friends, we now publish our harvest of sun-pictures and information pertaining thereto. Its title is suggested by the obvious fact that the nests we were unable to include in the former work, had been chiefly inaccessible to us at that time because more rare. Its supplementary character is our excuse for including under such a title, several which cannot be called rare, and are even common. Such find a place simply to complete, as far as possible, our list, and as not appearing in the former collection.

Although the results of our labours may not loom large to the eye when compressed within the two covers of a book, some notion may perhaps be gathered of what it costs to collect the materials for such a work, when it is mentioned

that the mere railway and steamboat travelling involved totals up to something like ten thousand miles, to say nothing of many and many a long and fruitless tramp across bog and fell. But even yet we have not been able altogether to accomplish our hope and intention of photographing the nest, eggs, or breeding-place of every bird propagating its species within the British archipelago; and I need hardly repeat that we shall be grateful for any help in finding specimens of the few remaining to be figured by my brother's camera.

A great deal of our work has been of an exceedingly pleasant nature; but I regret to say that such of it as concerns a few of our rarer breeding birds, gallantly striving year after year to maintain themselves in their old haunts, with a persistence only known to inherited love, has often been of the saddest character. When, in spite of all the protective legislation devised by the wisdom and experience of British statesmen and ornithologists, it is possible for one of our very rarest birds to be robbed of its eggs for ten years in unbroken succession, and collectors boast that with a bottle of whisky and a kettle of hot water they can possess themselves of any specimen they desire, the present condition of things is manifestly hopeless. Eggs protected by law are still openly hunted for in the broad light of day by children, young men and old men, maidens and white-haired dames; and, incredible as it may sound, even waited for for hours together, morning after morning, until

they are dropped into the nest by their layers. When the eggs of any species reach an attractively high figure in dealers' catalogues, it is a gloomy day for its slender band of representatives; but what shall we say of the prospects when a presumably rich collector deliberately places a premium upon its destruction, by giving 100 per cent. more than the recognised market price, which was all that he was asked for a clutch of eggs?

The Wild Bird Protection laws are very like a beautiful padlock and chain, hanging useless on a widely-opened stable-door which it is nobody's business to lock; and I have no hesitation in saying that the only real good done in the United Kingdom in the way of bird preservation, has been accomplished by private effort. As such private enterprise has now abundantly demonstrated in the case of the Great Skuas, in Unst, where the birds have doubled their numbers, instead of dwindling away to extinction as was predicted, the Eider Ducks at the Farne Islands, and the various species, including the Lesser Tern, at Wells, in Norfolk, absolute personal protection on the spot is the great desideratum. Further, I am persuaded that nearly all true collectors (*i.e.* men who will not own a single egg they have not taken and properly identified themselves) would help rather than hinder any really practical attempt at protection. I have been told by some that they are influenced by reflections of the following character, when they find a rare bird's nest:—" Well, if I don't take this clutch, Brown

is coming this way next week, and he will." And, without question, this is actually what happens. On one occasion my brother and I induced an exceedingly careful and genuine collector to leave a clutch of rare eggs, of a variety which I know would have much enhanced the value of his cabinet; but a day or two afterwards another collector chanced to pass that way, and secured them without let or hindrance, although they were under the supposed double protection of an Act of Parliament and the guardianship of the owner of the land, who, however, had no watcher of any kind near.

As a mere matter of fact, instead of the law helping to preserve our rarer breeding birds, it would, if put in motion against an offender, actually help forward their destruction. Legal procedure would mean publicity; and, once a place now only known to a few became notorious to the many, it would attract a crowd of people who would, without the restraining influence of a watcher, soon work havoc with the subject of litigation, especially if there was anything to be made out of it. Anyone doubting this need only turn to the case of the slaughtering pot-hunters who were prosecuted for the damage they did to the sea-fowl breeding on Grasholme Island; I have been told by several Welsh naturalists that they are sorry action was ever instituted, as it has done incalculable harm to the birds by advertising the island, and thus attracting other evil-doers.

Here I may say that while we have, wherever we thought it would add to the interest and value of the work, followed the advice of our friend Dr. Bowdler Sharpe and given a picture illustrative of the breeding-haunt of a bird meriting such form of treatment, these additional illustrations (which naturally pertain to our rarer birds), whilst being absolutely faithful, avoid as far as possible all chances of identification. In the text, too, I have carefully refrained from supplying such information as would be calculated to increase a mischief already sufficiently acute and disastrous.

Respectable dealers in natural history specimens have, I believe, very little sympathy with egg-collectors of the mere *bric-à-brac* order, and some of them, I am delighted to be able to say, care a good deal for the rarer breeding birds. Not long ago I heard of one well-known professional naturalist in the West of England absolutely refusing to entertain an offer of some rare eggs, which he knew to be under the supposed protection of an Act of Parliament, and which he had every reason to imagine were British-collected.

Whilst fully recognising the immense value, from an educational point of view, of a collection of stuffed birds, especially when set up with the life-like actuality of South Kensington, it is difficult to understand why, from a purely national one, we have never given any practical attention to the effective preservation of the infinitely more interesting and precious living creatures

themselves. Broadly speaking, all wild birds are the property of the State as species, and no man has the right to kill or rob the last representatives of a single one in danger of extermination. Modern conditions of life seem to have rendered it necessary that the same power that houses and takes such excellent care of our dead birds for the edification of the public, should also make some practical effort to conserve such of our living ones as are in danger of banishment. In the first place, a steadily growing interest in British birds and their habits amongst all classes of the community, has established a claim to some small national expenditure in order to protect a source of pleasure to the many, against the wanton rapacity or thoughtlessness of the few. And in the second, our islands are so small and travelling facilities so great, as to enable nearly all who take an intelligent interest in our country's birds to visit even the rarest of them in their native haunts—living, loving, and labouring at home amidst their natural surroundings.

I would humbly suggest that instead of printing and posting lists, pretending to protect birds that do not in many cases need protection at all, we should select a dozen species, admitted by a committee of practical ornithologists to be most in danger, and afford them effective personal protection during the whole of the breeding season, by placing reliable watchers night and day upon their nesting-grounds.

Sportsmen are often the gratuitous recipients of

a good deal of ignorant abuse in regard to the destruction of our rarer breeding birds. I know some who very laudably preserve Golden Eagles, Peregrine Falcons, Buzzards, and Ravens on their property, at the cost of a considerable amount of game, without saying a word about it to anyone. We often hear a good deal about the destruction of the first-named bird, which, unlike its scarcer neighbour, the White-Tailed Eagle, is really in no danger at all. As a matter of fact, the Golden Eagle is now highly valued on many deer forests in Scotland for services rendered. It has a fondness for preying upon blue hares, which, when too numerous, render themselves an unmitigated nuisance to the sportsman by giving the alarm all too soon to his ever-watchful quarry. The majority of sportsmen are good field naturalists, and I feel sure that very few of them would be unwilling to allow a really rare predatory bird its natural tithe of weaklings, if approached in a proper spirit. I would commend those who so roundly abuse sportsmen and their servants for the loss of a number of predatory birds, that are often whitewashed in ignorance of their true character, to a study of another side of the account, namely—the thousands and thousands of our sweetest song-birds and their eggs and young, saved every year by a wholesome dread of the man in velveteen.

I am, however, sorry to say that some game-keepers are mischievous from zeal, ignorance, or inquisitiveness. Only the other day an old watcher laughingly admitted to me that he did not know

that the Green Plover and Lapwing were one and the same bird, and I have knowledge of some of the younger generation shooting rare birds merely to find out what they were.

Although the damage done by boys is of little moment, so far as the great majority of our rarer birds are concerned, that done near large towns and in thickly-populated districts, where even our commonest species, with few exceptions, cannot be spared, is terrible to contemplate. Something requires to be done to humanise our little country urchins, the majority of whom cannot tolerate the sight of anything so beautiful as a bird's nest and eggs. From a fairly extended experience, I have no hesitation in affirming that for one country lad who takes a clutch of eggs to blow, preserve, and study, there are fifty who take them for the merely wanton pleasure of destroying something beautiful beyond their powers of appreciation. Besides breaking eggs and doing helpless nestlings to death, some of them are guilty of the unspeakable cruelty of actually barring up birds sitting on their nests in hollow trees with stones, and consigning the faithful creatures to a living tomb. I would much like to see a really interesting and well-illustrated school reading-book devoted entirely to British Natural History, and the elder boys taken out once a month and put through a lesson in field observation, binoculars in hand.

Our friend Dr. Forbes, Curator of the Natural History Museum, Liverpool, recently suggested to my brother the desirableness of giving, whenever

possible, the scale of a photographic reproduction beneath it. This hint we regard as valuable, especially in regard to illustrations containing nests and eggs, and we have every reason to hope that it will be appreciated.

We have to express our grateful thanks to the following gentlemen for valuable assistance rendered in the preparation of this work:—Sir Arthur John Campbell-Orde; Cameron of Lochiel; Mr. J. Whitaker, of Mansfield; Mr. R. J. Ussher, of Cappagh; Rev. M. C. H. Bird, of Stalham; Dr. Herbert Langton, of Brighton; Dr. J. Salter, of Aberystwith; Mr. Lawrence Edmondston, of Baltasound; Mr. H. H. Mackenzie, of Balealone; Mr. J. T. Proud, of Bishop Auckland; Mr. J. Paterson, of Great Yarmouth; Mr. W. A. Dutt, of Lowestoft; Mr. W. Graveson, of Hertford; Mr. C. Snell and Mr. W. J. Roberts, of Torquay, and many other bird-lovers throughout the country.

In conclusion, I very sincerely hope that all who can will do something towards saving our rarer British breeding birds from extinction. They, and not mere accidental visitors to our shores, are of real importance. Try to save the few species most in danger, and keep a watchful eye on the reduction of others that are from some cause or other on the decline; for once a bird drops below a certain point of rarity, the premium upon its skin and eggs appears to seal its doom. Let us not forget that we all owe posterity a debt, and that the deliberate doing of anything calculated to lessen its pleasures is a wicked

responsibility. Let us remember that, as time goes on, the struggle for existence is likely to become keener and keener, and our future men and women will require to turn more and more to Nature and her children for health and recreation.

RICHARD KEARTON.

CATERHAM VALLEY, SURREY.

October, 1899.

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OUR RARER BRITISH BREEDING BIRDS. UNIV. OF — CALIFORNIA, BLACKCAP.

THE Blackcap is a bird I always associate with a favourite old Surrey orchard beside the placid river Mole, where I first heard its wild sweet song, and saw its nest and eggs, years and years ago. Although pretty generally distributed, there are many districts in which I have neither seen nor heard it, in spite of the fact that they appeared to furnish suitable conditions of cover, water, and so forth. It breeds sparingly in certain parts of Scotland and Ireland, and throughout suitable districts of Wales, and is a lover of small woods and spinnies with plenty of undergrowth, shrubberies, old orchards, and gardens, and bits of waste land with plenty of brambles, nettles, and bushes near to some sluggish stream.

Its nest is composed of straws, fibrous roots, and dead grass, often intermixed with cobwebs, and is lined with hair. It is a slight structure placed at varying heights of from two to ten or twelve feet from the ground, amongst briars, thick hedgerows, brambles, nettles, gooseberry, and other small bushes. Our illustration was secured at Rainsworth Lodge, Nottinghamshire.

The eggs of the Blackcap number five or six, and are subject to considerable variation in ground colour and markings. One type is greyish-white,

suffused with buffish-brown, and blotched, spotted, and marbled with dark brown; another, faint brick-red marked with a darker tint of the same colour and reddish-brown; whilst a third kind is said to be faint blue, marked with yellowish-brown and grey. Some specimens are indistinguishable from those of the Garden Warbler, but a sight of the widely differing females of either species will easily settle any doubts in regard to correct identity.

BUNTING, CORN.

NOWHERE have I met with the Corn Bunting half so numerously as in the Outer Hebrides, where the species may be fairly described as abundant. Wherever there is a crofter's hut and a bit of cultivated land in some of the islands, such as North Uist, there, sure enough, will be a pair of these sober-coloured, easy-going birds. During the breeding season the male may be seen for hours together every day sitting on some coign of vantage wearisomely iterating his weak, squeaking, unvaried song, which sounds to me something like *pit-pit, chizzy-chizzy chea-ea-ea*, and becomes very monotonous when forced upon the ears of the listener for any considerable time.

Upon being approached whilst sitting on a wall or other eminence, the bird seems loth to summon sufficient energy to move, and when it does so, often goes away with both legs hanging down, as if too idle to gather them up.

One authority describes the species as most abundant in the southern counties of England, but, with all due deference to him, I do not think



BLACKCAP'S NEST AND EGGS.

(About one-fifth natural size.)

the Western Isles can be beaten, and I have knocked about both parts freely in search of materials for my books.

The Corn Bunting makes its nest, on or very near the ground, amongst growing corn, coarse grass, clover, peas, on banks, in a low bush, at the foot of a hedge, and in other similar situations. It is built with coarse hay or grass stems, straw, and lined with fibrous roots, fine grass, and occasionally hair. Our illustration was secured in the south of Ireland.

The eggs number from four to six, and their ground colour varies from pale buff to dull purplish-white, spotted, blotched, and streaked with purplish-brown of varying intensity, and underlying markings of grey. Taking into consideration their large size, situation of the nest, and the ease with which their lazy, clumsy-looking owner may be seen, there should be no difficulty about identification.

BUZZARD, COMMON.

WHILST being far from common in the general acceptance of the term, I do not think I should be justified in describing this bird as rare, for I have seen two pairs on the wing at once in Wales, where my brother has photographed the nests of several both in cliffs and trees. We have also met with it breeding in the Hebrides and several parts of the mainland of Scotland. When on the Grampians last summer, I heard a story of how our photographer, in descending a deep, overhanging cliff without assistance from anyone to figure a Buzzard's nest and eggs a year or



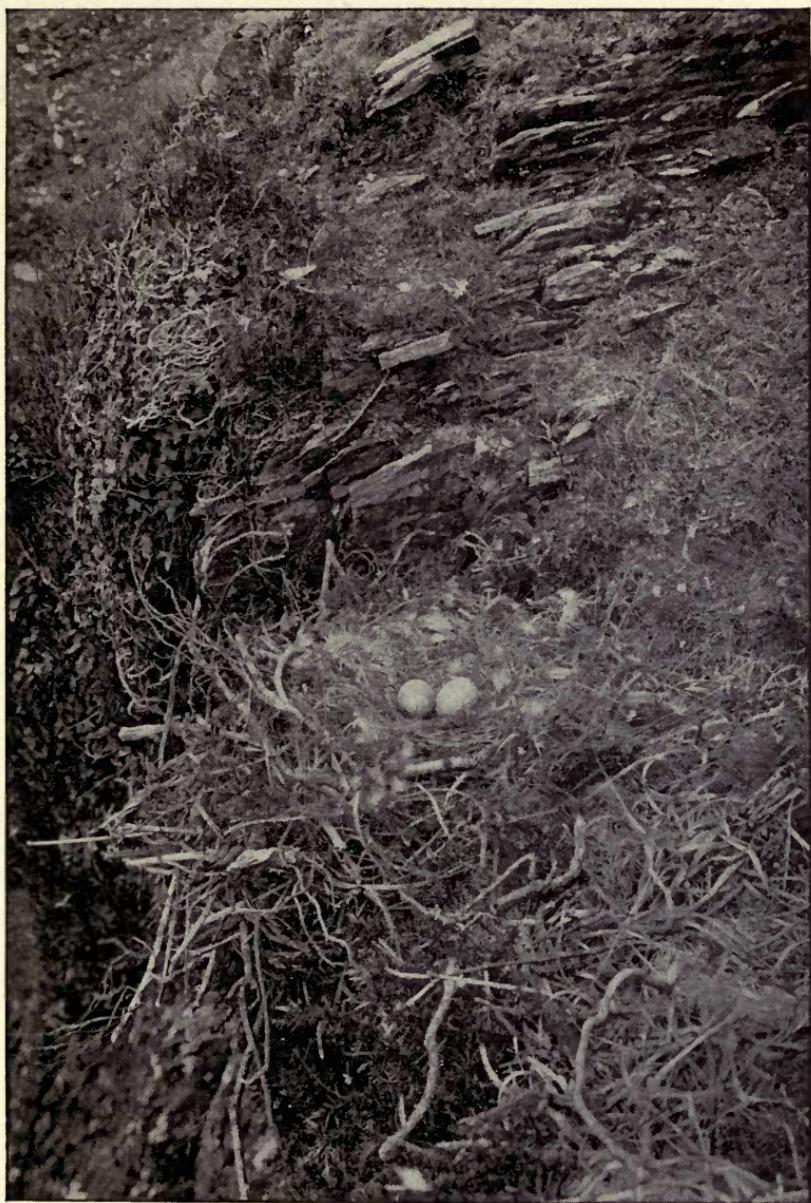
CORN BUNTING'S NEST AND EGGS.

(About one-fifth natural size.)

two ago, frightened a shepherd. Having been told where the bird had built, my brother borrowed a long rope and crowbar, and, stripping off all his clothes except trousers and shirt, climbed a steep mountain side with his apparatus. Upon arriving at the top of the precipice he drove the crowbar into the ground with a lump of rock, tied his rope to it, and, with his camera on his back, began his descent hand over hand. A shepherd who happened to be looking on, upon seeing him disappear over the edge of the crag, was so overcome with emotion that he fell on his knees and clutched at the grass. Upon regaining mastery over his feelings, he walked away declaring that the photographer would never come up again alive ; but he did, and with a picture too !

When in the air near its breeding-haunt, the Common Buzzard may be easily identified by its broad wings, square tail, and plaintive, cat-like mewing note as it circles majestically overhead. I have occasionally seen it severely mobbed by Carrion Crows. If not harried too much by collectors in certain parts of Wales where there is no game-preserving carried on, it ought to hold its own for a long time to come. I sincerely hope it will, for it adds a considerable degree of life and charm to some of the bare lonely mountains, on the edges of which it may be seen hovering in a breeze very much like a great Kestrel.

Its nest is made of sticks, often in considerable quantities, lined with hay, dead grass, leaves, or wool. My friend Dr. Salter, of Aberystwith, tells me that, according to his experience, Buzzards use thinner sticks than Ravens in building their nests, and generally place a few birch twigs with



COMMON BUZZARD'S NEST AND EGGS.

(About one-ninth natural size.)

green leaves on in the interior. It is occasionally built in such a simple situation on a mountain side that it can be easily reached without the aid of ropes, as was the case with the nest figured in the accompanying illustration.

The eggs number from two to four, although the majority of clutches consist of three. They are subject to a certain amount of variation in regard to colour and size, but are not likely to be mistaken for those of any other British breeding bird except the Kite, and the extreme rarity of that bird renders confusion somewhat improbable.

CAPERCAILLIE.

THIS splendid member of the Grouse family has had a somewhat chequered career as a British bird. There is no doubt that it lived in the north of England in pre-historic times, and that the burning of large tracts of pine forest in Scotland and Ireland in order to get rid of wolves and other vermin, helped greatly to reduce its ranks and prepare the way for its extinction, which came about in both countries towards the close of the eighteenth century.

It was reintroduced from Sweden in 1837; since which time it has thriven and spread until I have heard it is regarded as a nuisance in some parts of Scotland, on account of the injury it does to young firs, upon the tender shoots of which it principally feeds.

The bird places its nest, which simply consists of a natural or scraped hollow in the ground lined with a few leaves, bits of grass, or pine needles,



CAPERCAILLIE'S NEST AND EGGS.

(About one-fifth natural size.)

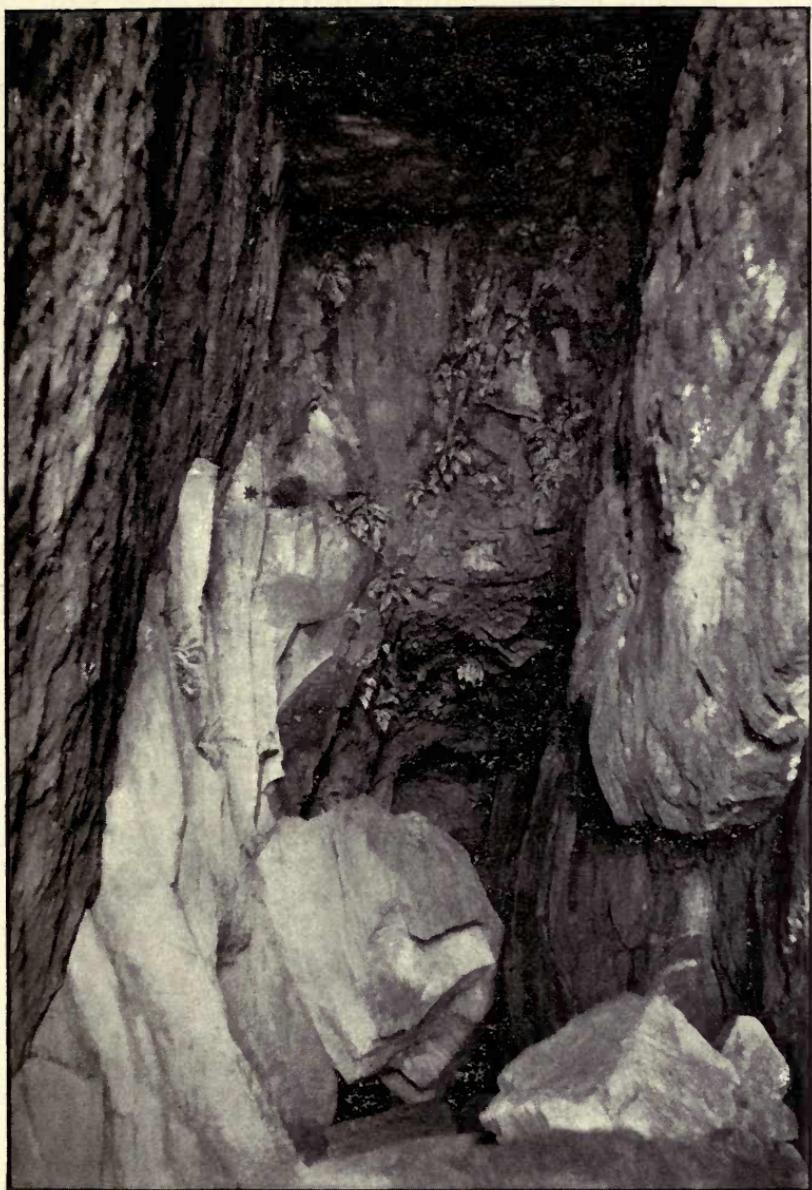
under some bush or bramble amongst grass, heather, or in the open, in spruce, Scotch fir, larch, and oak and birch forests throughout the counties of Perthshire, Stirlingshire, and Forfarshire. Our illustration was obtained in the first-named county not far from Dunkeld, and had the female sat a moment longer my brother would have succeeded in making a study of her on her nest.

The Capercaillie lays from six to twelve or even fifteen eggs of a pale reddish-yellow ground colour, spotted and speckled all over with two shades of darker orange-brown. Their large size distinguishes them from the eggs of the Black Grouse, with which alone they are likely to be confused.

CHOUGH.

FROM one cause or another this beautiful bird seems to have been gradually on the down grade in point of numbers since Shakespeare's time, when it bred in the cliffs of Dover. It still maintains a lingering foothold in one or two places on the south coast of England; but when men actually wait beneath its nest, morning by morning, in order that they may turn its eggs to monetary account as dropped, in some of its ancient strongholds, as I am told on good authority they do, its banishment from the maritime cliffs of England seems to be only a question of time.

It still breeds sparingly in Wales, and also in Ireland, where our illustration was obtained. The nest was situated on a small ledge in a cave where, as may be judged, it was no easy matter to photograph it. The exposure lasted something



CHOUGH'S BREEDING HOLE.

* Nest

like fifteen minutes, and the nest has an added interest in the fact that it was the last of its kind, in all probability, examined by the late Mr. Seeböhm.

Amongst the inner Western Isles of Scotland it is said to have suffered banishment from some of its old haunts through the aggressive spreading of the too numerous Jackdaw, and its ranks are certainly thinned in that part of the country by the fierce Peregrine Falcon. I know one Hebridean island in which the Chough was within the memory of man the commonest breeding species of its family, but the advance of the impudent Jackdaw and other causes have reduced it to something like eight pairs. In addition to the above causes, the request for the bird as a cage pet has no doubt also helped in the gradual diminution of its numbers.

Although resembling a Rook or Crow, the Chough may be easily recognised by its orange-red bill and legs, and its note is much shriller and more metallic than that of the Jackdaw.

Its nest is composed of sticks, heather stalks, grass and wool, with an occasional lining of hair, and is placed in fissures, clefts, and caves of maritime cliffs and holes in old ruins. The eggs, numbering four or five, and occasionally six, are of a dirty creamy-white, sometimes tinged with blue or green and spotted with light brown and ash grey. They are not likely to be confused with those of any other species except the Jackdaw, and the noisy presence of the parent birds is sufficient to settle any doubts upon the point.

CORN-CRAKE.

CORN-CRAKES' nests are not easy to find, on account of the facts that they are well hidden, and generally situated amongst grass, corn, and such other growing crops as farmers naturally do not care to have trampled over. On several occasions we have sought diligently for a nest in a favourite old haunt, but in vain, until the mower's scythe came along and revealed its whereabouts. At the beginning of June I visited a lonely spot near the head of a Westmoreland ghyll, that used to be much beloved of Corn-crakes, in the hope of finding a nest, but was disappointed to discover that even such a conservative species will at times forsake an ancestral home.

Upon reaching North Uist every bit of cultivated land, especially on the west side of the island, appeared to be tenanted by Landrails. They had arrived on the 7th of May, according to my friend Hector Mackenzie's diary, and on the 12th of June I commenced to search for a nest in one of his meadows that appeared to be alive with them, to judge from the chorus of grating, unmusical notes that filled the air day and night, especially when the weather was fine. My host's shepherd, a keen, well-informed naturalist, brought a dog along that he thought would be calculated to assist me in my task, and by its aid we turned three pairs of birds out of some colt's-foot growing round the field, and several pairs out of the interior ; but we failed to find what we wanted. We then hunted an adjoining pasture through which a small iris-fringed stream ran ; but although we flushed three or four more pairs of birds, we saw nothing in the shape of a nest. What rather surprised me was that the birds never appeared to

run when scented by the dog, but jumped up and flew away with their legs hanging down directly he approached too near where they were sitting.

The shepherd adjudged it too early to find any eggs, but upon returning to the field we had first tried, by his dog's aid, we discovered a nest containing six eggs in less than five minutes. This was during the afternoon, and before twelve o'clock the following day there were two more eggs in the nest, which was very scantily lined with bits of dead rushes. I again visited it, when it contained its full complement of ten light-buff, freckled with red-brown and ash-grey, eggs, and was surprised to find that the owner had added a quantity of green grass, which had dried and withered under her, to its interior. This addition to the structure had made it a little more concave than when first discovered, and of course enhanced the bird's chances of covering her ten large eggs.

I paid this particular Corn-crake a visit once or twice whilst she was brooding, and she sat so closely that I could have easily caught her. Instead of running off amongst the tall grass, she simply darted away a foot or two to give herself the necessary impetus, and then took wing.

Our illustration has been made from a photograph taken when the nest contained eight eggs.

CROSS-BILL.

THIS extremely interesting, though somewhat irregular wanderer, breeds sparingly in various parts of the United Kingdom where suitable conditions for the procurement of an adequate and regular



CORN-CRAKE'S NEST AND EGGS.

(About one-third natural size.)

food supply prevail. It is said to be increasing in numbers, but were such not the case there would be no fear of the extinction of the species so long as we continue to grow plantations of cone-bearing trees, since some members of the great continental incursions, which take place from time to time, would be sure to stay and nest with us.

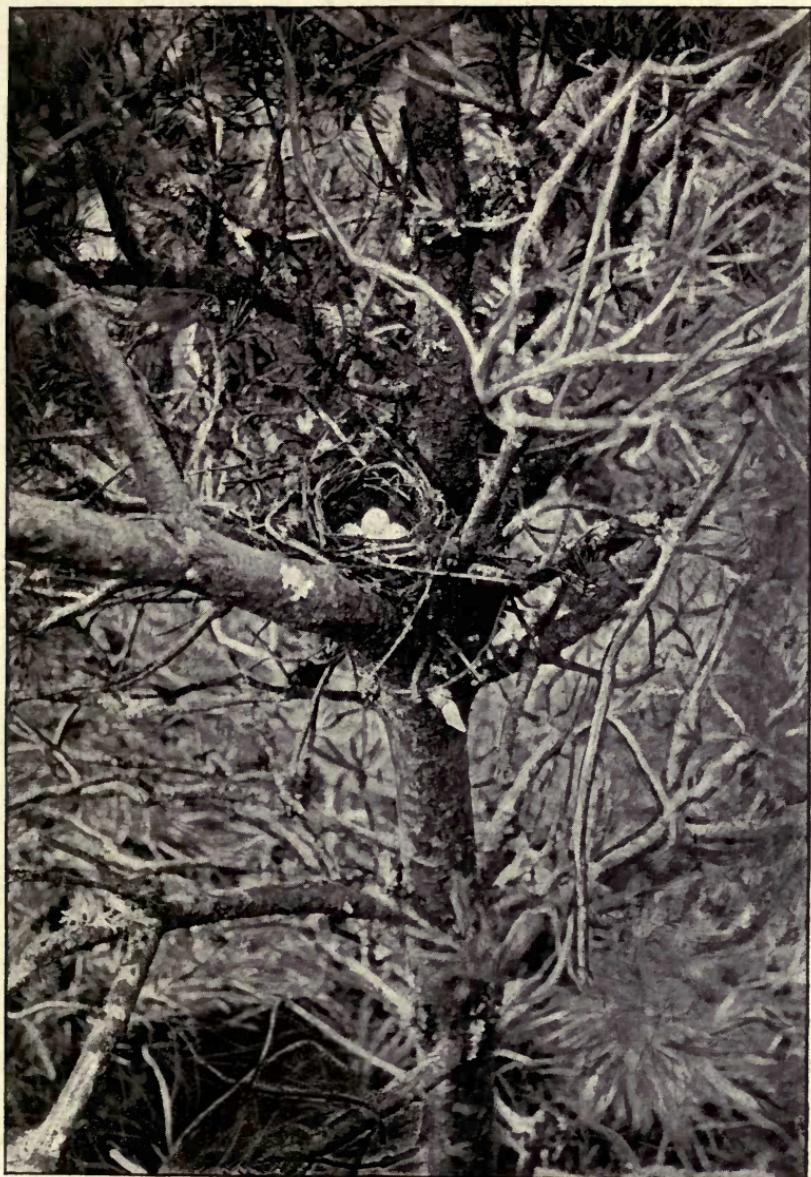
Although sometimes feeding upon insects and the pips of apples, the Cross-bill is essentially a coniferous-tree-loving bird, and when a small flock is at breakfast in the branch of a fir-tree, its members keep on fluttering in and out, and sending down such a shower of fragments of the cones from which they are busy extracting the seeds, that the ground beneath quickly becomes thickly strewn with them.

A small colony lived all last winter and spring in and around the town of Torquay, where there is every reason to believe young ones were reared.

The nest is built in a fork or on the branch of a larch or Scotch fir-tree, at a height of from five or six to forty or even fifty feet. It is composed of slender twigs, coarse dry grass and rootlets, with an inner lining of fine grass, hairs and feathers.

Our illustration was secured near to Cappagh, in Ireland, where our friend Mr. R. J. Ussher had four pairs breeding within a very limited area, when the photograph was taken in 1896. Although notorious for their erratic patronisation of even a favourite breeding-haunt, they have nested there regularly every year since, and had young ones as early as March this year.

The eggs, numbering four or five, are white in ground colour, faintly tinged with blue, and very sparingly speckled with reddish and pale brown



CROSS-BILL'S NEST AND EGGS.

(About one-fifth natural size.)

spots. Both nest and eggs closely resemble those of the Greenfinch, but the facts that the bird breeds much earlier and is a close sitter, affording ample opportunities for identification, serve to prevent any mistake.

DIVER, BLACK-THROATED.

WHILST in North Uist last spring, I saw quite half a dozen pairs of the Red-Throated Divers, but only came across one of the Black-Throated species, and have every reason to believe that there were not more than two of the latter in the whole island.

In order to visit the pair which I studied, I was obliged to enlist the friendly assistance of a gamekeeper, a gilly, and the factor's clerk. Together we dragged an abnormally heavy old fishing-boat from its home on a sea-loch, over a rough, hilly stretch of moorland to a freshwater one, boasting an islet for every day in the year, and a goodly stock of Wild Geese, Sea Gulls, and other aquatic fowl. Our task was an exceedingly arduous one, and on the return journey was rendered positively excruciating by the voracity of myriads of midges.

We had not been in the neighbourhood of that part of the loch tenanted by the Black-Throated Divers long, before one of them came flying over us and pitched on the other side of a promontory. Rowing up to this we landed, and obtained a good view of the bird, which the keeper adjudged from its large size to be a male, some eighty yards away. Upon catching sight of us he promptly



BLACK-THROATED DIVER'S NEST AND EGGS.

(Barely one-quarter natural size.)



BLACK-THROATED DIVER'S BREEDING HAUNT.

dived, and reappeared a considerable distance further off. When first seen in the water he was swimming deeply, but after diving and coming to the surface again no part of his body was visible, and the protruding head and neck were strangely suggestive of a snake peeping from the loch.

A little later we obtained a splendid view of the female, as she alighted with a gliding splash in the water not more than forty yards from our boat, lying partly hidden by a bank.

We found the nest on the wee islet shown in our second illustration. It consisted of a mere hollow in a few square feet of earth lying on the gently-sloping rock. The cavity had a few bits of dead grass that might reasonably have been blown in by accident lying at the bottom of it.

The Black-Throated Diver is easily distinguished from its near relative, the Red-Throated Diver, when seen through a good pair of field-glasses in a fairly bright light, and its pair of eggs, buffish to dark olive-brown spotted with umber to blackish-brown, are larger and not so profusely spotted.

EAGLE, WHITE-TAILED.

THIS species has been decreasing gradually as a breeder within our shores for the last two centuries, and it is really alarming to think of the number of favourite old eyries that have become tenantless in the north during the memory of man. I know one or two places where the White-Tailed Eagle still maintains a lingering foothold, mainly on account of the inaccessible character of the ledges whereon it builds; but for obvious reasons, wild



WHITE-TAILED EAGLE'S NESTING SITE.

horses would not drag from me any information calculated to hasten the extermination of such a fine bird.

Many immature specimens have in past years been trapped and shot in the eastern counties of England, whilst on their way between their summer and winter quarters, and invariably reported in the newspapers as Golden Eagles. A friend living in the Hebrides tells me that adult birds are often destroyed on the mainland of Scotland by gamekeepers, unknown to their employers, a fact for which I can vouch from personal experience. The mischief caused by killing one of a pair of old Sea Eagles is greater than that which would accrue to almost any other bird of prey, because of the difficulty the remaining individual experiences in the finding of a fresh mate. As an illustration of this, something happened to one of a pair of birds tenanting an old eyrie in the Shetlands in 1898, and the remaining specimen not only hung about the site by itself all the rest of the season, but turned up again during the spring of 1899, still single.

Our illustration represents the cliff, on an overhung ledge of which the eyrie was situated. At the time of our visit the solitary bird was sitting on it, and gave us a splendid sight by flying leisurely away out to sea and back again over our heads, with the morning sunshine full on it, and a small crowd of unheeded gulls in pursuit. My brother quickly descended by the aid of ropes, but was deeply disappointed to find the nest empty, save for a number of Sea Eagle's feathers. The eyrie was by no means a large one, and consisted simply of a few sticks and a liberal quantity of moss and dead grass and wool.

Curiously enough, a single bird only now visits Foula.

The eyrie of the White-Tailed Eagle is usually a bulky structure of sticks, twigs, heather, stalks, grass, and wool, because of the fact that it is enlarged and repaired from year to year. It is very shallow at the top, and generally situated on the ledges of high inaccessible maritime cliffs, although sometimes in a tree or on a small island in the middle of some solitary loch.

The eggs number from one to three, but a clutch usually consists of two, which are nearly always white and unspotted, although specimens have been found on rare occasions marked with pale red. They are not likely to be confused with those of the Golden Eagle on account of their rough texture and usual absence of coloration.

FALCON, PEREGRINE.

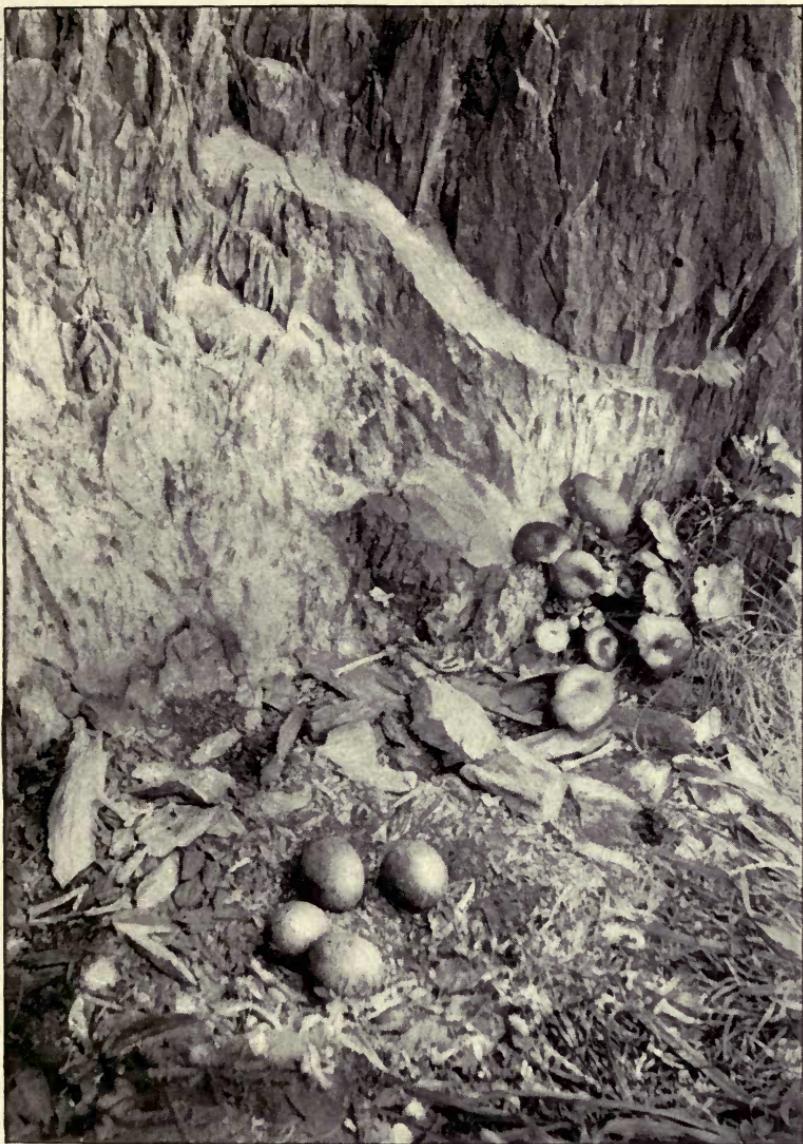
WHILST one would naturally wish to see a noble bird like the Peregrine Falcon oftener in England, and not hear of it as the subject of a reward at such a high price as five pounds sterling per pair, there can be no doubt that in the interests of other defenceless species it requires to be kept within certain numerical limits in many parts of the British Islands. For instance, it would be folly to fulminate against its destruction on a Scottish grouse moor, where I have known as many as four pairs breeding at the same time. To my mind, this is one of the species which proves that the preservation of birds in this country needs to be regulated by a committee of

practical ornithologists, since the real interests of our native birds as a whole are often obscured by the vapourings of people absolutely without knowledge of the facts. It may come as a piece of news to writers who vary the abuse of sportsmen by pulverising parsons and schoolmasters for destroying rare birds, that many of the former now recognise the value of the Peregrine Falcon as a natural and useful weeder-out of weaklings and disease-stricken birds on grouse moors, and that there are places where it is preserved in moderation for this purpose.

I know of one or two places in England where it still breeds, or attempts, at periods of a few years, to do so without success. It nests in Wales both on the coast and inland, is fairly common in Ireland, where our illustration was obtained, on the mainland of Scotland and in the Western Isles, in the Shetlands and Orkneys; and, where the cliffs are high and the country wild and sparsely populated, is perfectly able to take care of its perpetuation as a species.

The species does not appear to build a nest. My brother has been down to the eyries of several in Scotland and Ireland, and found the eggs lying on the earth and stone chippings in a hollow in the mould resting on the ledge chosen by the bird as a breeding site, or in what appeared in one instance to have been a very old Raven's nest.

The eggs, numbering from two to four, vary from light orange yellow to pale russet red in ground colour, and are thickly mottled, spotted and clouded with various shades of reddish brown. Neither the bird nor its eggs can very well be mistaken when seen at home on beetling cliffs surrounded, as a rule, by wild, bare country.



PEREGRINE FALCON'S EYRIE AND EGGS.

(About one-sixth natural size.)

FLY-CATCHER, PIED.

THE Pied Fly-catcher, although local, is by no means a rare bird. I have during half a day's tramp in South Wales come across as many as four pairs, although not specially on the look-out for the bird. I have also met with it breeding in Westmoreland and Yorkshire, but never had the good fortune to find its nest in Scotland.

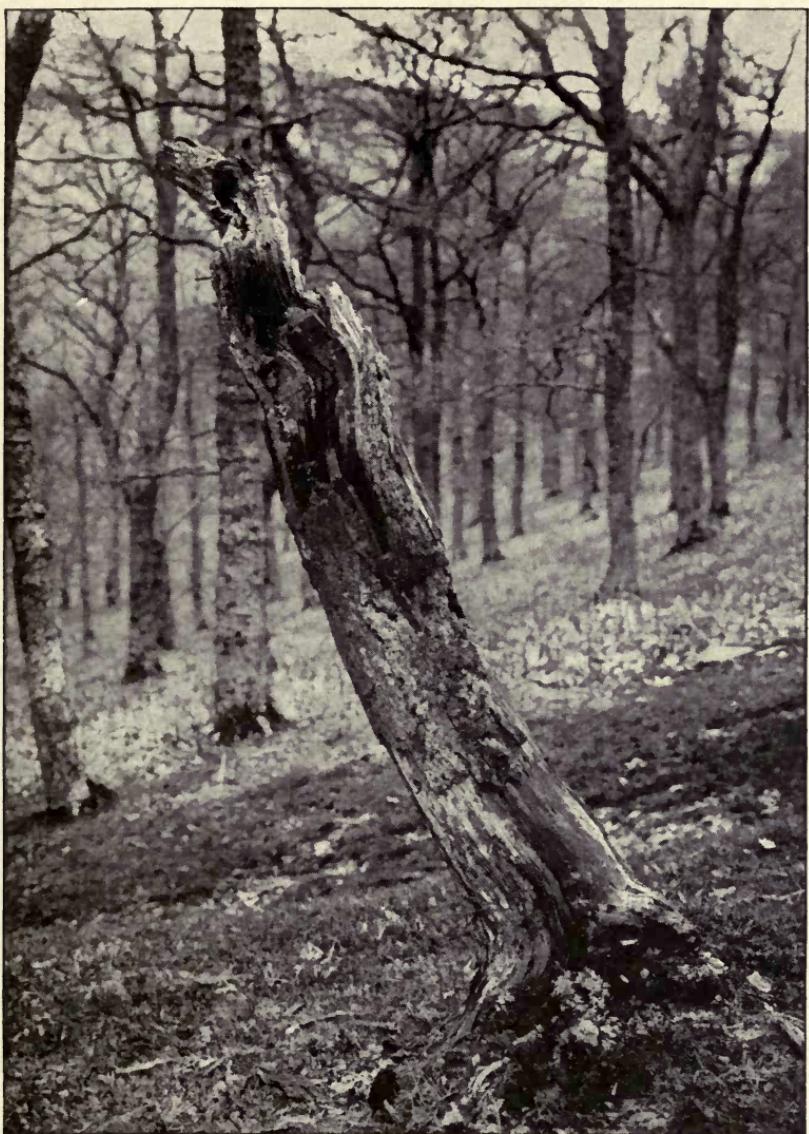


PIED FLY-CATCHER'S NEST.

(About three-eighths natural size.)

It is easily identified, especially when the male is seen, as his white wing and forehead patches, black upper- and white under-parts, render him a very conspicuous bird for his size.

He has a pleasant little song, resembling that of the Redstart so much, that whilst out in Wales with my brother one day last spring, I stopped him in order that I might detect the whereabouts of what I supposed to be a member of the latter species singing in a cottage garden. The songster turned



PIED FLY-CATCHER'S NESTING SITE.

out to be a Pied Fly-catcher, which I watched for several hours. His mate was not far away, and together they wandered from one part of the garden to another, but never left it for any length of time.

Although the Pied Fly-catcher generally resorts to wild out-of-the-way places in which to breed, it often takes up its quarters in some garden close by a much-frequented roadside.

It builds in a hole in a tree or wall, and occasionally in a cliff, but generally at no great height from the ground. I have seen four or five nests in the two first-mentioned kinds of situation, and none of them were more than seven or eight feet high. Our illustrations were secured in the Towy Valley. After the decayed stump and its surroundings had been photographed I took a piece of the rotten wood in front of the nest away in such a manner that when the eggs had been figured it could be replaced without doing the site any appreciable injury.

The nest is made of moss, dry grass, dead leaves, and hair used as an internal lining. Our friend Dr. Salter, who has had a good deal of experience in regard to the breeding habits of the species, says that its nest may always be distinguished from that of the Redstart by the absence of feathers, and such has certainly been the case in the limited number of nests I have examined. Whilst out with Dr. Salter one day, he showed us a decayed tree trunk from which he had taken the eggs of a Greater Spotted Woodpecker. Upon examining the hole we found it occupied by the nest of a Pied Fly-catcher, and that the Woodpecker had hewn herself a fresh home a few inches higher up, and a Great Tit had occupied a hole on the opposite side of the stump.

The eggs of the species under notice number from

five to eight, of a uniform pale blue or greenish-blue, resembling those of the Redstart so closely that they require the most careful identification.

GOLDFINCH.

THE great enemy of the Goldfinch in this country is undoubtedly the bird-catcher. I have evidence of the species being cleared out of some neighbourhoods by the persistent efforts of the fraternity. Fortunately, very few of the birds advertised by small provincial dealers as caught in this country have really been procured within our shores. They are trapped in Germany, shipped to London, and then sent down to the provinces. I have seen them packed in Seven Dials for the purpose.

Nearly all last winter I had the opportunity of studying a small flock living in a large fallow field at the back of my house, and happily, Goldfinches still breed with us in fair numbers in certain localities. I visited the grounds of a large private house in Sussex last May, and saw several nests containing eggs and young. One of the gardeners, who took an intelligent interest in bird life, told me that he had known as many as ten occupied nests belonging to the species immediately round the house in a season.

By the aid of a ladder and three long sticks which we lashed to the legs of our tripod we succeeded in photographing a nest situated amongst the outer branches of a variegated holly tree, but it was on a dull, breezy day, and when the plates were developed my brother discovered that they had been ruined by the imperceptible vibration of the camera. We

journeyed to the place again the following week end, but were dismayed to discover that all the nests we had previously seen in accessible situations had been destroyed. They were overturned and hanging to the slender branches, and their contents lying broken on the ground below. One gardener had seen Cuckoos flying in and out of the trees, and said that the mischief had been wrought by them, but another older and shrewder man harboured an opinion that the nests had been prodded out by cowherd boys with their long sticks. My brother found the nest figured in the accompanying illustrations just as we were leaving the grounds. It was situated near the end of a slender downward trailing branch of a sycamore tree, and overhung a path bounded on one side by a high wall, and gave us considerable difficulty in photographing it.

I know places both in Norfolk and Devonshire where the Goldfinch breeds in small numbers still. It appears to be partial to gardens and orchards, and builds in fruit trees, sycamores, and evergreens. Its nest is made of rootlets, moss, grass, wool, spiders' webs, lichens, and lined with willow down, hairs and feathers.

The eggs, although smaller than those of the Greenfinch and Linnet, are similar in coloration and markings, so that careful identification is necessary. This is an easy matter, however, when the bird is brooding, for the observer has no difficulty in watching her on to her nest.

GOOSANDER.

ALTHOUGH absolute proof of this species breeding in the British Islands was not forthcoming until



GOLDFINCH'S NEST AND EGGS.

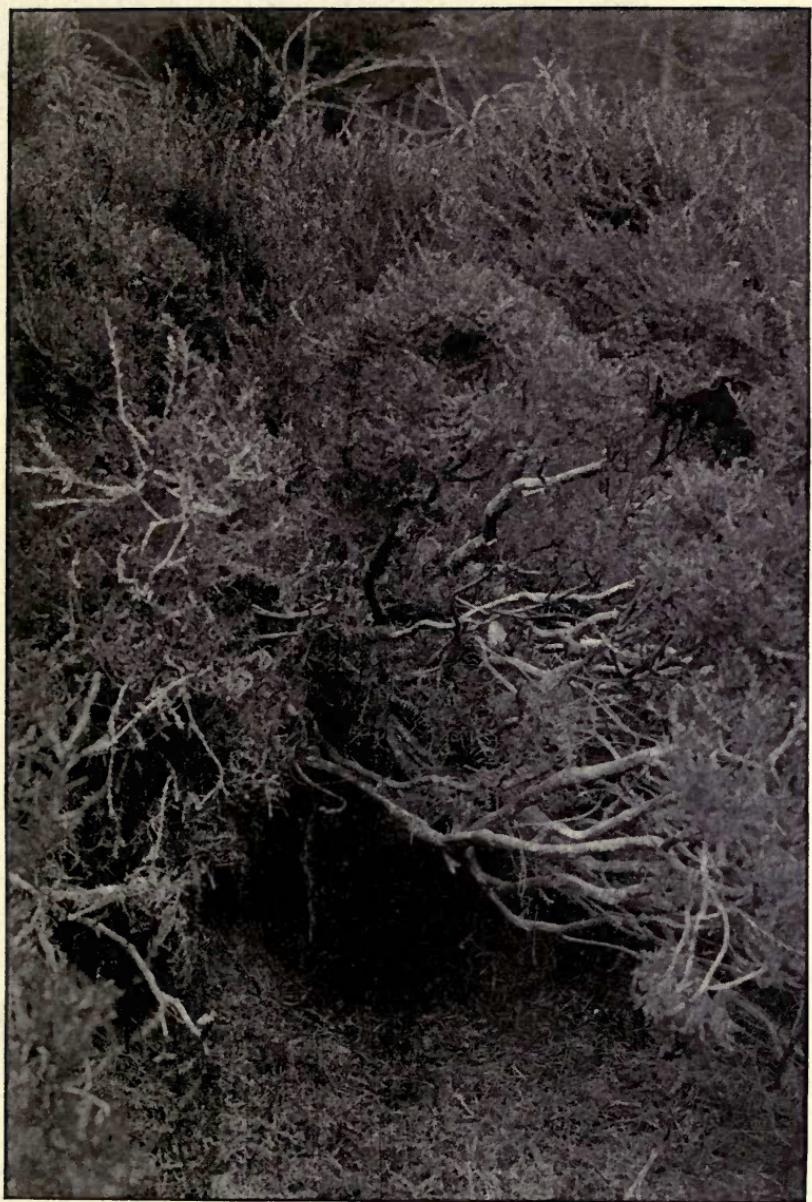
(About one-third natural size.)

as late as 1871, it seems to be gradually increasing in numbers, not altogether to the delight of anglers, on account of the trout it kills in Scottish lochs. However, there are a few proprietors who care more for birds than fish, and in consequence will not have it molested.

It is not so numerous as the Red-Breasted Merganser, three of the nests of which species I have found within a dozen yards of each other on a tiny islet in a Highland loch. One of these was in a hole right away beneath the roots of a tree, and until I made a careful examination of the old female (which I caught), the down and eggs, I thought I had succeeded in finding a Goosander's nest.

My brother journeyed a long way on one occasion in order to photograph a hollow tree trunk in which a Highland gamekeeper, who was a good practical naturalist, had found a Goosander sitting upon her eggs a year or two ago, but unfortunately discovered when he reached the place that the old piece of timber had dropped to bits, and been partly washed away by the mountain burn on the banks of which it had been grown. The keeper had known of another nest in a hole amongst some rocks on a steep timber-clad hillside overlooking a loch, so our photographer was driven back upon figuring the latter. I examined the hole myself, and found that, although it was in rock, the front was overgrown with heather and moss.

When the nest is placed in a hollow tree, no materials except down from the bird's own body are used; but when placed elsewhere—such as under rocks or the roots of a tree—grass and weeds are utilised in its construction.



GOOSANDER'S NESTING HOLE.

(About one-ninth natural size.)

The eggs, varying from six to twelve in number, are creamy white and smooth, and the down tufts large and greyish-white, without paler centres or tips.

GREBE, GREAT CRESTED.

THE long cone-like shape of the body of this bird when seen swimming in the water, and its beautiful crest, render its recognition an easy task, especially to the observer endowed with a moderately powerful pair of field-glasses.

There is every reason to hope that, in spite of persecution and the increased precision of firearms, the species is on the increase rather than decline; and it is an exceedingly pleasant duty to be able to chronicle the fact that it has been successful in establishing a breeding-haunt on a private piece of water as near London as Redhill, and that last summer a pair brought off their young in one of the lakes in Richmond Park.

We have seen and photographed its nest and eggs on several occasions on the Norfolk Broads, and Lord Walsingham's meres at Merton. The accompanying illustration was secured from an open boat at the latter place. As we approached the spot where the nest was situated, we heard one of the birds to which it belonged utter a harsh, croaking note, and found that the eggs had been left in too great a hurry to admit of their being covered over.

The nest is a sort of sodden pad composed of half-rotten aquatic plants, resting on the bottom where the water is shallow, but more generally a floating raft-like affair kept in its position by the



GREAT CRESTED GREBE'S NEST AND EGGS.
(About one-eighth natural size.)

surrounding reed-stems. As a rule it has but very little elevation above the water-line, and only a slight hollow for the reception of the eggs, which number from three to five—white when first laid, but soon becoming dyed yellowish brown from contact with decaying vegetation and the muddy feet of the parent bird. When the female leaves her nest of her own free will, she carefully covers her eggs with portions of the material upon which they are lying.

Like many other species, the Great Crested Grebe constructs a spare nest not far from the one in which the serious work of incubation is going forth. Some naturalists are of opinion that it is made for the male to use as a look-out station, and others as a landing-stage for the young. In all probability it serves both purposes, for the male bird takes charge of the young ones first hatched, whilst his mate incubates the remaining eggs.

Whilst on the Norfolk Broads with my friend, the Rev. M. C. H. Bird, late one evening last spring, we saw a pair of Great Crested Grebes swimming along with three or four little chicks between them. Presently one of these mounted the back of its parent, whose sex we were unable to determine on account of distance and lack of light. Our boatman, Alfred Nudd, a very capable and non-varnish-tale naturalist marshman, told us that the young Crested Grebes secure their positions on the backs of their parents by seizing some feathers in their bills, and that he once found a chick with three feathers plucked from its father's back swallowed right up to the base of the shafts. A curious thing about this point is that many observers have found feathers in the

stomachs of adult birds of this species. Possibly the habit may be thus formed, and then continued.

GREBE, LITTLE.

(*Dabchick.*)

THE Little Grebe is not nearly so rare as the casual observer might fancy. It generally manages to elude all but the keenest eyes by its retiring habits, and the promptitude with which it can dive and be gone without leaving the trace of a ripple behind, as soon as it discovers the approach of an intruder to its haunts.

As a rule it inhabits smaller bodies of water than the Great Crested Grebe, and we have met with its nest in old dykes and quite little ponds. The structure consists of dead and decaying aquatic plants, and is generally hidden amongst reeds, rushes, or whatever else growing in water will afford it fairly effectual shelter. For the size of the builder the nest is large, and oftener than not floats like a tiny reed-locked raft. It is flat-topped, and such an inconspicuous amount of it rises above the surface of the water, that nine hundred and ninety-nine people out of every thousand taken out of the street, would adjudge it to be a mere accidental collection of drifted weeds. Every particle of it is thoroughly soaked, and I have seen the eggs lying half-buried in water when their covering of rotten reeds and rushes has been removed.

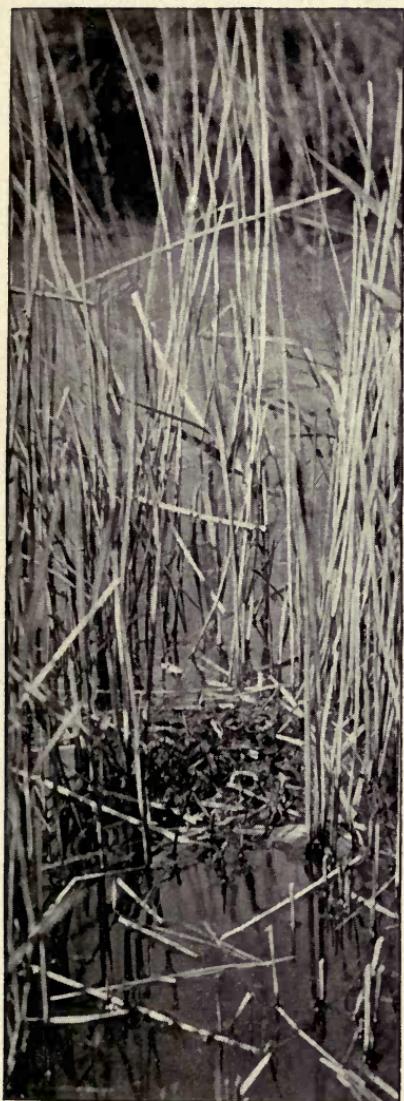
The eggs number from four to six, or even seven. They are white when first laid, but soon become discoloured by contact with the mother's

feet and body, and the materials with which she covers them whenever she has the necessary time, before leaving her nest. Although the eggs shown in one of our illustrations were covered as indicated, in the other, when we arrived on the scene, the one laid last could be easily picked out from the rest by reason of its much cleaner condition.

The photographs from which the pictures have been reproduced were obtained under the most difficult circumstances. The nest was situated near the middle of a wide Suffolk dyke, and the wind was blowing hard and cold, rendering a stand hip-deep and a long journey to dry clothes prospectively unpleasant; so we procured a long plank, stretched it across the dyke, and whilst my brother and Last Farman shielded the reeds from the wind with a large travelling rug, I secured some studies. Once when an uncommonly strong gust of wind struck the rug and its holders, they had the narrowest escape possible of falling head-first off their plank into the water. They would undoubtedly have gone, had not my brother saved the situation by letting go his end of the rug and thus spilling the wind.

A Water-hen had her nest within two or three feet of that of the Little Grebe, and some of her chicks were enjoying themselves amongst the surrounding reeds, whilst others were making their wants known, in weak and plaintive notes, from chipped eggs.

The Dabchick bred some years ago on the Round Pond in Kensington Gardens, according to the veteran ornithologist, Mr. Harting; and until quite recently in Wanstead Park.



DABCHICK'S NEST (Covered).



DABCHICK'S NEST (Uncovered).

(About one-ninth natural size.)

GUILLEMOT, BLACK.

THE Black Guillemot is common enough in nearly all suitable places I have visited on the west side of Scotland and in the Shetlands. It is also said to be common in the Orkneys, and on the north and west coasts of Ireland. The Isle of Man is credited with a few pairs still, I believe, but I have never met with the bird at the Farne Islands, the Bass Rock, or in fact anywhere on the east coast. Whilst in St. Kilda I often had opportunities of studying the species within a few yards of me, by sitting perfectly still on the rocks just above high-water mark, and allowing them to swim into some little sheltered corner close to where their mates were sitting. Their black plumage and large white wing patches readily distinguish them at a considerable distance in the water, and, although they are meek, inoffensive-looking little creatures, I have upon occasion seen them fight quite furiously. Our illustration represents Finlay McQuien, the champion cragsman of St. Kilda, pointing into a fissure in which Black Guillemots breed every year.

In spite of the fact that most of the west side of North Uist is sandy and unsuitable to the breeding habits of the species, I saw several odd birds there last June, arguing the presence of sitting mates somewhere in the immediate neighbourhood. I was shown a little cave in which a Black Guillemot and Rock Dove nested within a few inches of each other last year. The former deposited its eggs in a hole gouged out of the rock by some forgotten tempest, and the latter in a horizontal fissure at a similar height, but in a different trend of rock.



BLACK GUILLEMOT'S BREEDING HOLE.

The bird under notice makes no nest of any kind, but simply drops its pair of eggs on the bare rock, in holes and crevices of sea cliffs or beneath boulders just above high-water mark. Its eggs have occasionally been found in holes in walls and under crags eighty or a hundred yards away from the sea.

The eggs are white, faintly tinged with blue-green or creamy buff blotched, and spotted with dark and chestnut brown and ash grey. They cannot well be mistaken for those of any other species when seen where laid by the bird.

HARRIER, HEN.

FROM one cause or another this Harrier appears to be gradually going in the same direction as the Marsh and Montagu, towards extinction.

MacGillivray reported it as "rather abundant in North and South Uist in 1841," and Gray found it "very common in the Outer Hebrides as recently as 1871." Its decline must have been fairly rapid since the latter date, at any rate, for this year the keepers in North Uist only knew of a single pair breeding in the island, and my friend Mr. Macalfish, at Loch Maddy, used to see the male come over his garden about the same hour almost every day in search of food. We took up our stand one morning in the bird's line of flight, and waited for hours together to get a sight of him, but unfortunately he did not take his usual route on that particular occasion. This habit of hunting the same country in the same direction, and at about a similar hour every day, has been commented



HEN HARRIER'S NEST AND EGGS.

(About one-sixth natural size.)

upon by many writers, and finds its parallel in the case of the Kite.

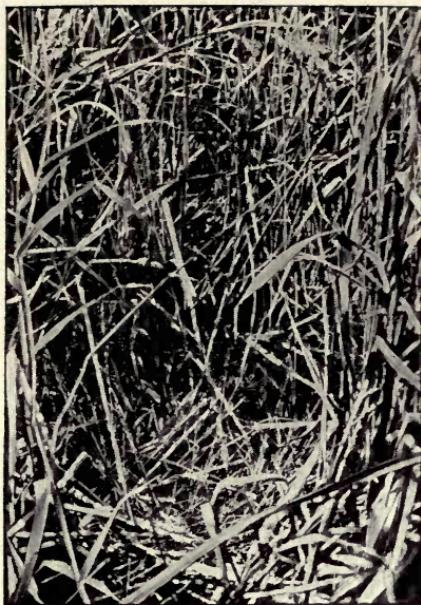
As it is now principally a migratory bird, and turns up in varying numbers from season to season, there is perhaps more hope for it in some of the large Scottish deer forests, than for it or its congeners trying to breed in England.

The photograph from which the illustration on the previous page has been reproduced, was obtained in the Outer Hebrides a year or two ago. The nest was placed amongst the deep heather, and was composed of dead stalks and withered grass. It is said that when situated on wet ground the nest is bulkier, and composed of sticks, sedge, reeds, and flags.

The eggs, numbering four or five, and occasionally as many as six, are white faintly tinged with blue or bluish-green, and occasionally marked with light rusty red or yellowish-brown. Their variation in size according to the age of the layer, and general resemblance to the eggs of the Marsh and Montagu Harriers attempting to breed in this country, render the most careful identification necessary.

HARRIER, MARSH.

THERE can be but little doubt that the Marsh Harrier is one of the very rarest predatory birds still attempting to breed in this country, and that its chances of ever succeeding in doing so are of the remotest character, unless it were to be afforded a very wide range of effective protection. Lord Castletown has very kindly held out a substantial reward to any of his keepers for the



MARSH HARRIER'S NEST.

(For measurements see page 46.)



HOME OF THE MARSH HARRIER.

finding of a nest on his grounds, where the species used to breed, in order that my brother might run over to Ireland and photograph it; but it has for years remained unclaimed, and Mr. J. H. Gurney has been unable to record a single nest in Norfolk for the last decade. As may readily be judged, we were therefore greatly elated upon receiving a letter from our friend the Rev. M. C. H. Bird last spring, to say that he had the nests of both the Marsh and Montagu Harriers for us to photograph. Such a great stroke of good fortune could not be neglected for a day, so down we went post haste to Broadland, where we were met by Messrs. Bird and Gurney, the former of whom took us all to the Marsh Harrier's nest, situated amongst the deep sedge grass shown in our oblong illustration. But alas! the nest was empty, and both the poor birds had been trapped before the hen had had an opportunity of laying a single egg. I found the remains of a leveret which one of the luckless creatures had killed and eaten a day or two before, and cut off one of its forefeet to add to my small collection of mementoes of rare birds. Mr. Bird says that a great difficulty about the preservation of Marsh Harriers is that they are easily trapped or poisoned, and their habit of wandering over a wide area in search of food renders them so liable to fall victims to somebody's gamekeeper.

The nest was placed on a quantity of broken-down sedge grass fourteen inches from the ground. It consisted of a small collection of hemlock stems gathered from the banks of an adjoining river, gladen, a briar stalk, and a few bits of rushes, reeds, and dead grass. It was nine inches in diameter, and had every appearance of

being unfinished. The marsh-keeper who trapped the birds says that the male of this species arrives a week before his mate from their winter quarters, and occupies his time in getting the nest ready.

The eggs of the Marsh Harrier number from three to five or six, and are white, although sometimes slightly tinged with milk-blue or pale bluish-green, and very rarely marked with a few rusty-red spots. They may be distinguished from those of the Montagu Harrier by their larger size, and the fact that the nest of the last-named bird is absolutely on the ground.

HARRIER, MONTAGU.

ALTHOUGH now, alas! a rare member of the Falconidæ family, this bird has attempted to breed within our shores much oftener than the last species during recent years; but, there is every reason to fear, with the smallest degree of success.

The nest figured in our illustration was situated not very far from the unfortunate Marsh Harrier's attempt at housekeeping, but was not built in such deep sedge grass. It was placed flat upon the wet marsh ground, and had a sort of little courtyard in front of it, where all the vegetation had been cleared away or beaten down. The diameter of the actual structure was about eight and a half inches, and its materials consisted of rushes, sedge, ragwort stems, and a few bits of dead grass. Mr. Bird considered it a large nest for two eggs, as the birds add materials, like many other species, as they lay their eggs.

We waited for several hours in a dyke not far

away in the hope of getting a sight of one of the birds, but in vain.

The eggs of the Montagu Harrier number from four to six, of a very pale bluish-white ground colour, occasionally marked with a few reddish-brown spots. They are smaller than those of the last species, and the fact that the nest is always placed upon the ground and not raised above it, affords considerable help in the task of identification.

HAWFINCH.

It is said that the Hawfinch has increased considerably in numbers throughout England during the last half-century or so. If this be the case, it is sad to think what the bird might have achieved but for the possession of a fatal weakness for green peas. This vice brings it into violent collision with the interests of the gardener, whose gun thins its ranks every summer in the most alarming manner. One in Sussex tells me that on an average he kills about a dozen every year in order to protect his peas from their ravages, and that the victims are mostly young birds of the season.

The shy, retiring habits of the bird often enable it to live in places where it is almost unsuspected, so that a greater army of observers better equipped with field-glasses may account to some extent for the above-mentioned increase. We have met with its nest in Surrey and Norfolk, in the latter of which counties our illustration was secured.

It is essentially an English breeder, and selects lichen-covered hawthorns, to which it seems most



MONTAGU HARRIER'S NEST AND EGGS.

(About one-seventh natural size.)

partial, holly bushes, fruit trees, and the horizontal branches of oaks and similar situations, in which to build its nest, in plantations, orchards, and on wooded commons.

Its nest is rather large and slovenly in construction on the outside, but more neatly put together in the interior. It is made of twigs, roots, and bits of grass mixed with lichens, lined with finer roots, grass, and hair inside.

The eggs, numbering from four to six, can hardly be confused with those of any other species, on account of their size and coloration, which varies from olive green to pale reddish brown in ground colour, spotted with blackish brown and streaked with dusky grey.

JAY.

THE Jay is as interesting as it is beautiful, and recognised as easily when seen on the wing, by its weak undulatory flight, as when unseen by its harsh note, which sounds something like *rake rake*. I must admit, however, to being thoroughly deceived by the latter some time ago. I was absolutely certain that I heard a Jay's note in a copse running parallel with a railway line, and, creeping up very cautiously to see if I could discover the exact whereabouts of the bird, was amused to find that I had been cheated by the remarkably imitative sounds produced by a plate-layer pitching gravel with a steel shovel.

The bird is not, so far as my experience goes, common anywhere except in Devon and parts of Essex, within such reasonable distance of Epping



HAWFINCH'S NEST AND EGGS.

(About one-sixth natural size.)

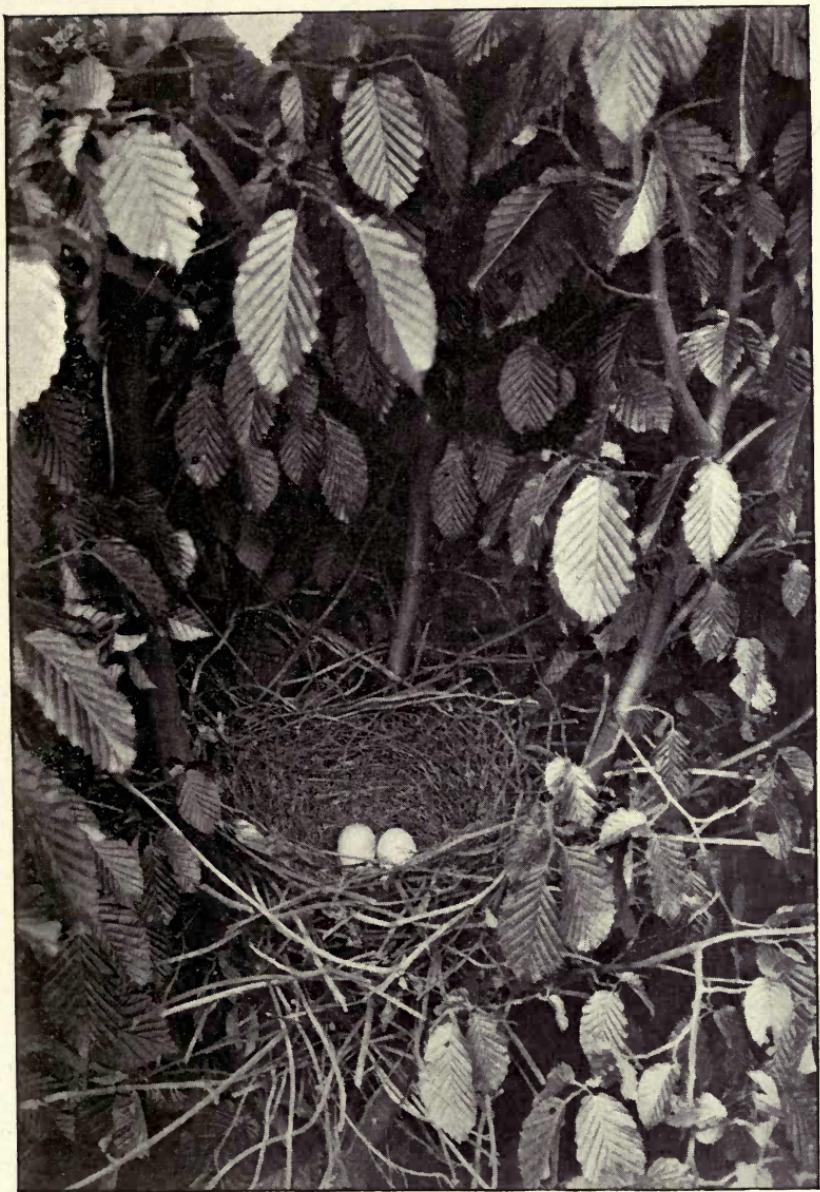
Forest, that mourners over the ordered destruction of a number of the species there not long ago may take heart.

It is a pleasant reflection for the bird-lover that even the most vigilant of gamekeepers cannot encompass the bird's destruction at times. We have a few pairs on the Surrey hills, and one of them to my knowledge defied the best efforts of an exceptionally energetic young watcher last spring. They ignored his traps, shunned his gun, and, what is more, hid their nest so effectually that he never found it.

We have met with odd pairs of Jays in the non-game-preserving parts of Wales; but neither my brother nor I have ever encountered it in Scotland, where it must be getting scarce, judging from the fact that we have been requested by gamekeepers to send them any Jays' wings we might come across in our wanderings amongst their English brethren. These were needed on account of the useful character of the blue wing coverts in the manufacture of artificial fishing-flies. The bird becomes so silent and wary during the breeding season, that the casual observer might be pardoned for thinking that it had deserted a wood in the spring, where he had heard and seen it plentifully in the autumn.

It feeds its young by thrusting its bill into their throats and regurgitating. If watched to its nest containing young from some hiding-place, the Jay will sometimes descend to the ground and hop round, and, in case of discovering anything of a suspicious character, will break through its usual habit of spring-time silence and dart off with a harsh squawk.

The nest is placed in evergreens, tall thick



JAY'S NEST AND EGGS.

(About one-fifth natural size.)

bushes in hedgerows, birch and other young and slender trees growing thickly together, and is generally at no great height from the ground. Although not a close sitter as a rule, I have occasionally had to scare it off its nest by shaking the tree in which it was situated. The structure is composed of slender twigs, with an inner lining of fine roots. Sometimes mud and grass are used in its construction. It is deep and cup-shaped, as it often needs to be for the safety of its contents during the prevalence of strong winds.

The eggs number from five to seven, of a dusky green ground colour, tinged with light blue, and thickly covered with light olive-brown spots, which are nearly lost in our illustration owing to their smallness and the photographic method of reproduction.

KITE.

IT is a sorry thing when a bird which was once sufficiently numerous in the streets of London to form one of its many wonders to foreign visitors, should have become so rare in even the remotest parts of the British Islands, that it pays a dealer to send men long distances in order to secure its eggs; and that one pair of birds should in consequence have tried to propagate their species for ten long weary years in vain. Such is the persistent robbery of the poor Kite, that I have heard a naturalist say he would be glad to hear of the death of the last pair in this country, in order that the species might be relieved from the never-ceasing persecution of the collector.

Mr. Cambridge Phillips tells me that one or

two pairs do actually succeed in bringing off their young in a certain part of Wales under protection ; but in spite of a rumour that the species still breeds on the west side of Scotland, there remains, I fear, reason to take a very gloomy view of its prospects in that part of the country.



ANCIENT HOME OF KITE.

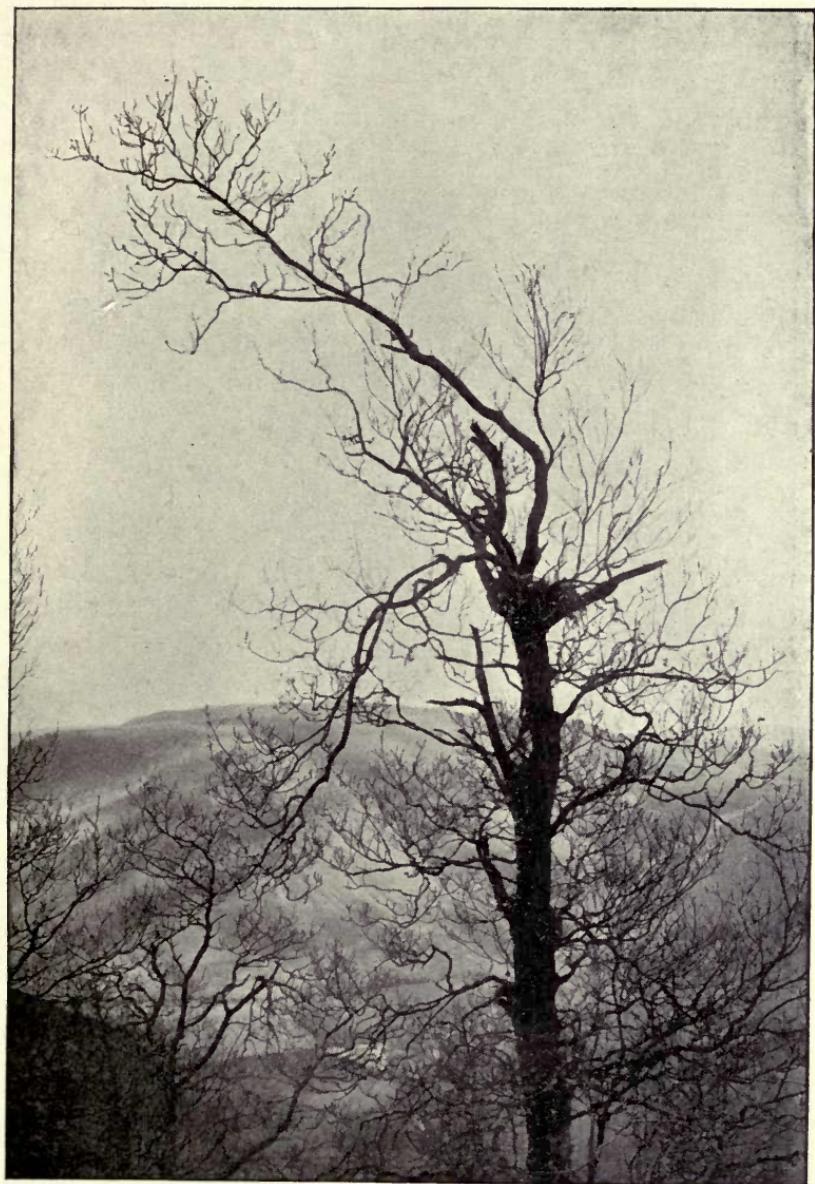
Curiously enough, one pair of Kites, known to my brother and myself as still attempting to breed in the Principality, owe their discovery and ruin to the fact that their ancient stronghold happens to have been the hiding-place of some Elizabethan outlaw, at whose shrine numbers of admirers worship every year.

We visited the locality last spring in the company of our friend Dr. Salter, of Aberystwith, who, whilst out one fine morning, was pointing to a high mountain ridge along which the Kites loved

to soar in search of food, when I espied a large bird travelling towards us just above the sky line of the identical ridge. Its progress was an easy-gliding soar, assisted by an occasional wing-flap or two, and my field-glasses soon made out the long sword-like wings and forked tail of a Kite. As the bird had been seen several mornings in succession hunting the same range of hills alone, we had some faint hopes that after all its mate might be sitting on an undiscovered nest in the neighbourhood, but unfortunately such proved not to be the case. We walked round to the ancient nesting-place where the birds have tried so long and unsuccessfully to propagate their species, but found nothing except grounds for suspicion that they had already been robbed; so we turned our steps towards a lonely glen in which they sometimes make a second seasonal attempt to breed, and had the good fortune to see them both at the old eyrie figured in our illustration, which they were engaged in repairing.

In this same little glen a pair of Carrion Crows reared a brood on one occasion, and the following spring a pair of Kites came along and enlarged the old structure for their own purposes. They had an old nest in an adjoining wood which had been repaired and added to for so many years that it rose to a height of two or three feet, and contained enough sticks to fill an ordinary cart.

A year or two ago my brother and I tried to save a Kite's nest in Wales, and, in response to an appeal in *The Field* newspaper, received a number of subscriptions to help us to defray expenses. Unfortunately, when we arrived upon the scene the eggs had already been stolen; so having failed in our object, we returned each



KITE'S NEST.

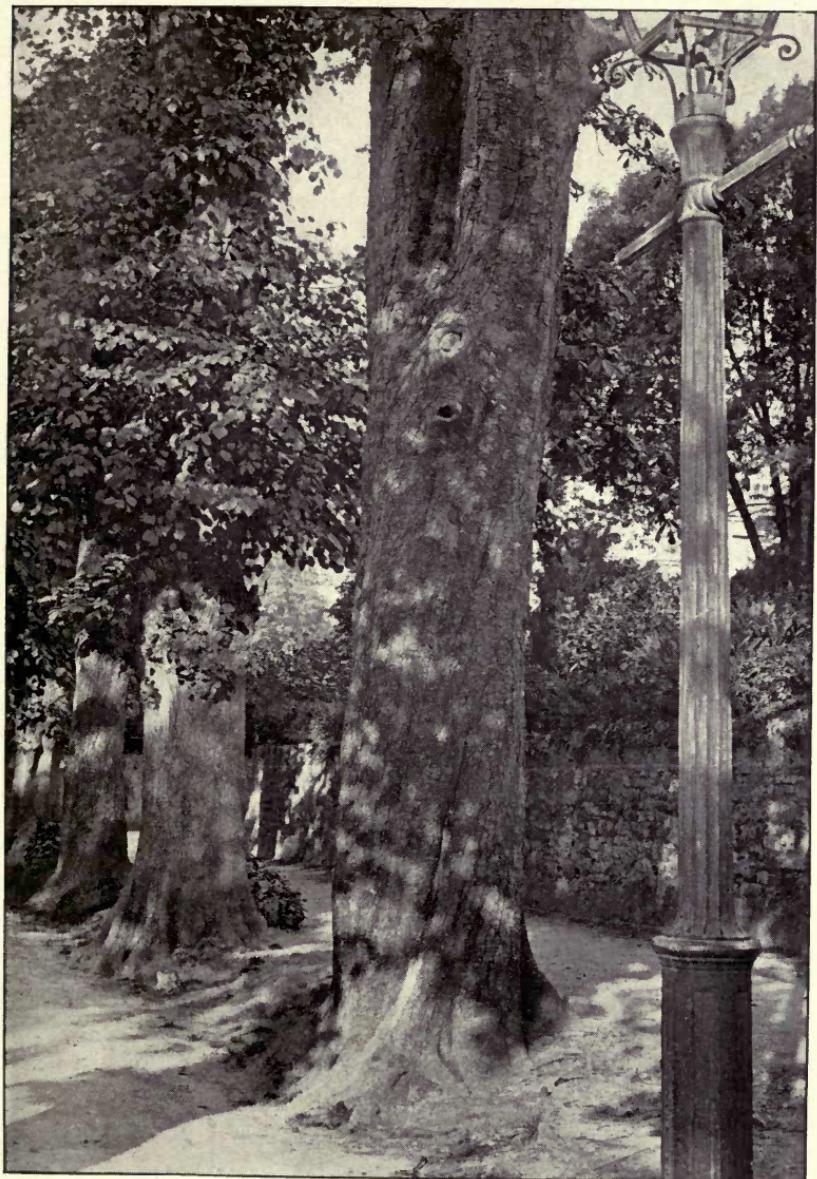
subscriber his money in full, and stood the expense out of our own pockets. On that occasion we found the farmers in the neighbourhood very wroth about the robbery—not, alas! because they loved the birds, but because they had discovered the monetary value of Kites' eggs, and felt they had been done out of something!

The nest is generally placed amongst the strong forked branches shooting out round the top of a tree-trunk, or on several springing from its side, and is composed of sticks, twigs, grass, moss, bits of rope, string, rag, old newspaper, and similar rubbish.

The eggs number from two to four—generally three—of a greyish dirty white, blotched, streaked, and spotted with dull red, brownish-yellow, and underlying greyish-lilac markings. The presence of the parent birds readily serves to identify the nest and eggs, and I would most earnestly plead with all lovers of British birds to do what they can to save such a fine species, now driven to the last extremity, from extermination. For once a non-migratory bird has gone from us, it is likely to be lost for ever.

NUTHATCH.

THE Nuthatch is fairly common in the wooded districts of the southern and midland portions of England. I have met with it close to London on both sides of the River Thames. It is an exceedingly interesting bird to watch running up and down the trunks and branches of trees in search of insects, or hammering a hazel nut cleverly fixed



NESTING SITE OF NUTHATCH.

in some crevice. I know a Surrey orchard wherein every available crack and cranny is filled in the autumn with the empty shells of Kentish cob-nuts, from which Nuthatches have extracted the kernels. The bird's note is easy to detect, especially the fine long whistle of the male uttered during the springtime. It is quite unlike the note of any other British bird, and at once arrests the attention of the naturalist.

The nest is made in a hole in the trunk or large branch of a tree, and occasionally in a wall or the side of a rick. Its most striking peculiarity is that if the hole chosen should be too large, the bird plasters it up with earth until it will only just admit her own body. I have never seen a hole without any plastering, but have examined one with so little that, in spite of being close to a footpath, its presence would in all probability never have been suspected but for the actions of the parent birds.

Our illustration was secured in one of the beautiful lime and chestnut avenues in the town of Torquay, where my friend Mr. Charles Snell says two pairs of Nuthatches live, at different points, all the year round, and are fed during the winter months by some considerate bird-lovers with Barcelona nuts. He informs me that he has often sat on a garden seat close by the tree, and watched the old birds run down the bark and into the hole to feed their young ones. By the aid of a ladder we made a somewhat minute examination of the plaster in the upper of the two holes in the chestnut tree, and found that it measured three and a quarter by three and a half inches, and was something like two inches in thickness. It was composed of the red earth of the country, small

pebbles, and road scrapings, and was as hard as if it had had a quantity of cement mixed with it. The entrance hole was at the bottom, where it could not very well be shown in a photograph taken from the roadway below. It measured one and a quarter inches in horizontal and one inch in vertical diameter. At the time the tree was figured, on the 31st of last July, a pair of Sparrows were busy building a nest of their own in the hole. I examined a Nuthatch's nest in Sussex upon one occasion, and could see the bird sitting on it, but was unable to dislodge her.

The nest is composed of leaves, flakes of bark, and grass, and where the bird has to enlarge the accommodation, of chips and dust. The eggs, numbering from five to eight or nine, are white spotted with reddish-brown. They are similar in size to those of the Great Tit, but the plastered hole and the presence of the owner form a ready and certain means of identification.

OSPREY.

THE Osprey is one of our rarest British birds, and would in all probability have long since ceased to breed within our shores but for the protection afforded it by a few Scottish bird-loving proprietors. As a migrant, it has, unfortunately, to run the gauntlet of innumerable shot-guns, whose owners miss no opportunity of grassing anything uncommon, every spring and autumn, as it is on its way to and from its breeding-quarters.

It is an extremely interesting bird, and my brother and I have both devoted many days to

studying and photographing it at home, on a lonely loch buried deep amongst the giant hills of Auld Scotia.

Upon approaching the wee island on which the bird breeds every year, I beheld the female standing erect, like a feathered sentinel, at the very tip of the withered stump rising above her eyrie. As my boat was rowed close in she precipitated herself into space, and, throwing up her wings, allowed her body and legs to droop as if she had broken her back, the while uttering her peculiarly weak alarm note. Altogether her aerial antics, upon first leaving the much-favoured perch above her eyrie, were such as to suggest the erratic behaviour of a mother Plover on leaving her chicks. When she re-alighted on her coign of vantage, she always held up her wings in the attitude in which the camera has caught her, as shown in the frontispiece to this work.

The male bird did not put in an appearance for hours, and when he did come home brought a fine large trout in his talons. When we first espied him he was sailing round and round in wide circles far overhead, but as he came nearer his wonderfully clever method of carrying his prey became more and more apparent. His legs were extended almost to their full length, and the fish grasped firmly about the middle, with its head and tail pointing in the same direction as those of its captor, rendering its air-resisting qualities almost nil. At any rate, although a big fish, it did not appear to interfere with the bird's powers of flight in the least, and the fact of its hanging so far below the body of its captor made the whole scene strangely suggestive of a miniature flying machine with a cigar-shaped car attached.

One day I watched the female tearing pieces off a large fish and giving them very daintily to one of her chicks, which sat up in the nest in precisely the same manner as a young Golden Eagle. Directly I approached too near for her peace of mind she rose, and, to my surprise, carried the mutilated body of the fish away with her. On another occasion, when I rowed my boat too near the islet on which the eyrie was situated, the male, happening to be there at the time, seized a large stick, and flying off with it in the same attitude as he carried his prey, dropped it from a great altitude into the loch, and then took his departure towards the place where he did most of his fishing.

Although the Osprey has no chance of showing its gregarious nature in this country as in America, an additional pair—doubtless the descendants of those under consideration—have established themselves on the same loch and built an eyrie on the mainland, which fact has, of course, robbed them of a chance of rearing any young ones up to now. The proprietor of the property upon which these two pairs of birds breed, or endeavour to do so, is fortunately a thorough rare-bird preserver, and when those nesting on the island have eggs, every boat on the loch is securely chained and padlocked.

Ospreys are wonderfully conservative birds, and if unmolested return year after year to a favourite haunt and repair the old eyrie. It reaches an enormous height. The specimen in the frontispiece once reached the incredible height of nine feet before it was blown down by a gale of wind. It is said by observers living on the spot that, in obtaining materials for its eyrie, the bird never

takes sticks from the ground, but always breaks them off some decaying tree.

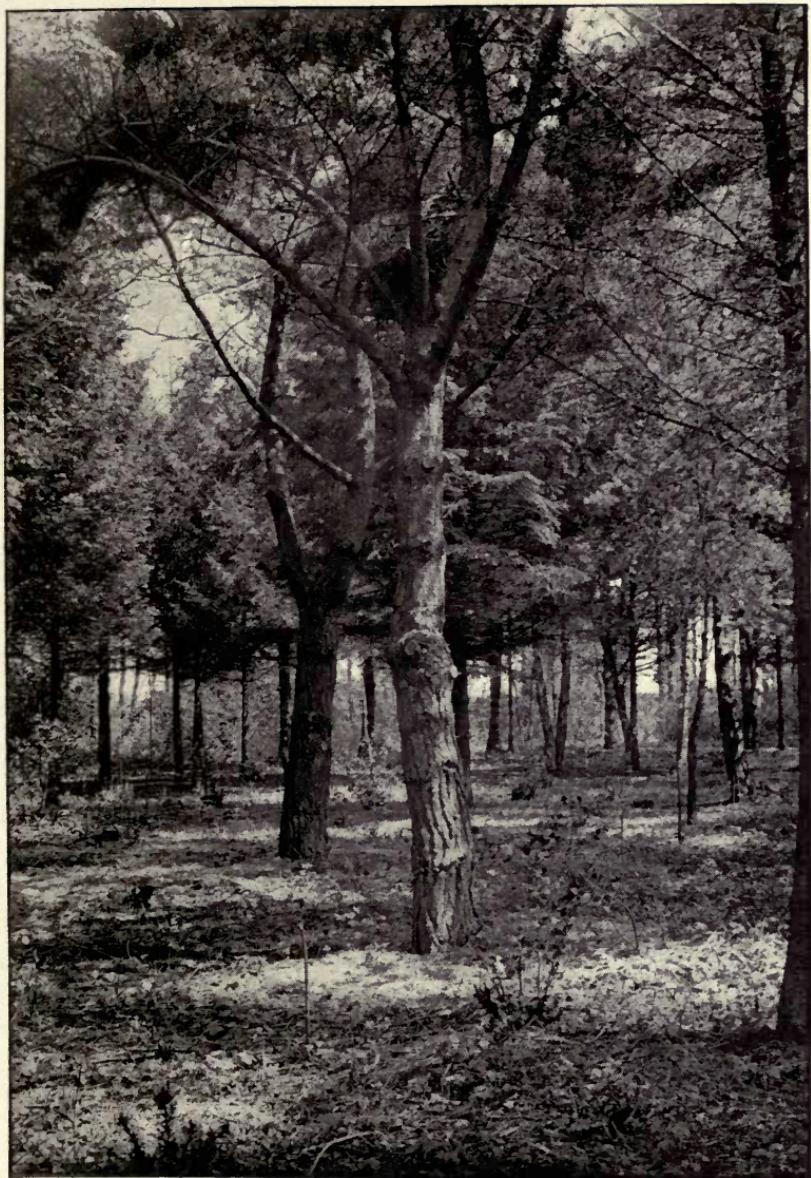
A neighbouring keeper told me that he once saw one of the Ospreys living on the loch, which must for obvious reasons remain nameless, plunge after a fish which was so large that it nearly dragged its would-be captor out of sight under the water, and that after a struggle lasting quite five minutes the bird was obliged to release its quarry, in all probability a large pike.

Our illustration, forming the frontispiece to this work, was taken with one of Dallmeyer's telephoto lenses, which my brother worked whilst standing waist-deep in the loch, where he waited for two hours in weather none too bright or warm.

OWL, LONG-EARED.

THE Long-Eared Owl—although not often seen on account of its nocturnal habits, and the fact that it lives principally in dark fir and spruce plantations—is much more numerous than would at first sight appear to be the case, in spite of the fact that it meets with scant mercy at the hands of many gamekeepers. My friend Mr. J. J. Baldwin-Young tells me that it is quite common for a bird of its class amongst some of the Lincolnshire woods, and that he has seen the ground for yards together under favourite trees littered with its castings, and adds that the good it does to neighbouring farmers must be very great.

Although the bird generally adopts the old nest of a Crow, Heron, Wood Pigeon, Magpie, or an ancient squirrel's drey, it occasionally departs



LONG-EARED OWL'S NEST.

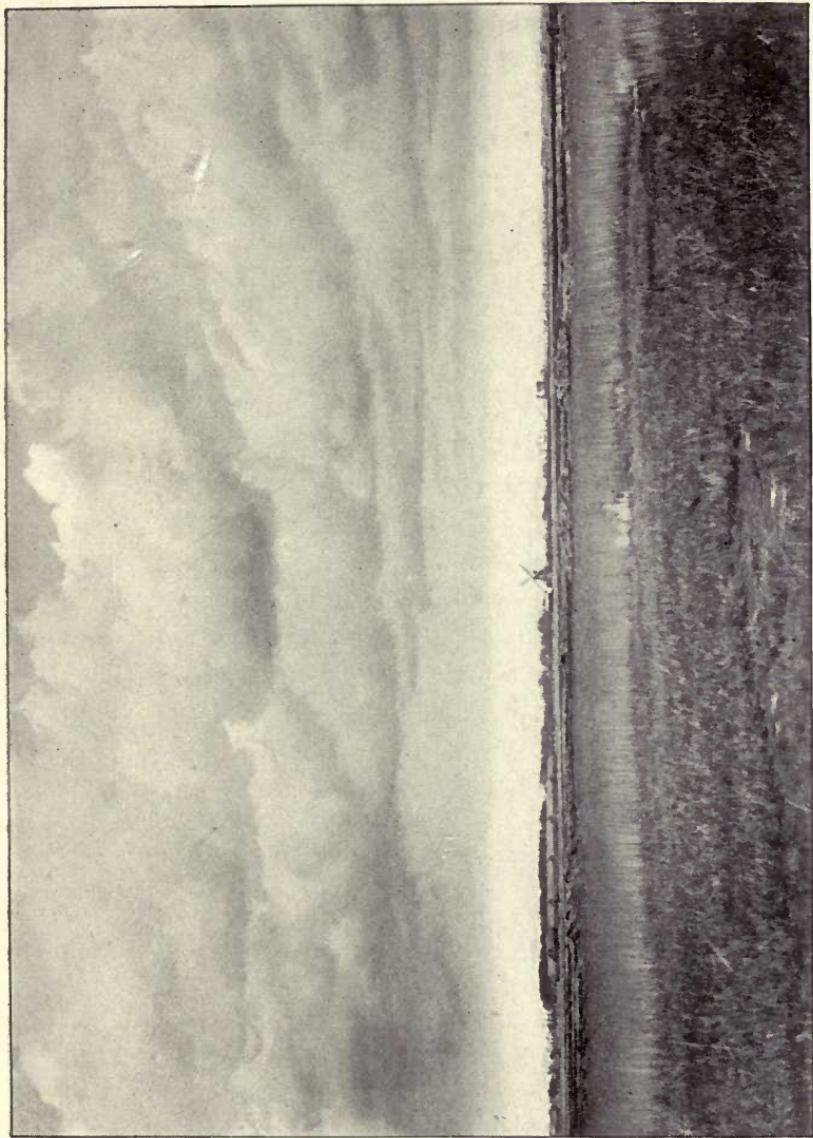
rather radically from this rule; for the Rev. M. C. H. Bird, of Stalham, tells me that he has known one member of the species nest on the ground in his neighbourhood, and I have an instance of its breeding in a large hole in a tree in Essex. In this the bird and its young ones lived in peace, until it took to visiting a farmer's Dove-cotes close by at night-time and absconding with his young pigeons, when a breechloader killed it *in flagrante delicto*.

Our illustration was secured in a small wood at Ingham, in Norfolk. From the appearance of the structure in which the bird had laid its eggs, one would conclude that it had once been a Carrion Crow's nest, although placed rather low down for that bird's love of a good outlook. The Long-Eared Owl reared a brood of young ones in it this year; but, unfortunately, they were captured directly they left the nest, and after being kept in confinement for a while and fed upon dead ducklings, they were killed and sent to the bird-stuffer's shop.

The eggs number from three to seven, but more generally four or five are found, white in colour and oval in shape.

OWL, SHORT-EARED.

ALTHOUGH probably never anything but a scarce species during the nesting season in the Norfolk Broad district, this bird seems to have maintained its position better than many others that might be placed in the same category in regard to breeding



HOME OF THE SHORT-EARED OWL.

numbers. This year two nested in the neighbourhood of Hickling Broad, and one of them succeeded in hatching a brood.

Quite recently the coarse grass, rush, or other herbage growing round the Broads has acquired such value as fodder for the London market, that in some places every available blade is gathered in; and it is really no exaggeration to say that some of the 'bus horses now trotting up and down the Strand, breakfast off Water-hens' old nests, for they are all raked up and forwarded with the rest of the stuff, which, I understand, is greatly relished by the animals to which it is given. The Short-Eared Owl's nest figured in our illustration had been discovered by the mowers of this coarse fodder, and although they considerably left the bird a patch of rushes and grass round her nest, she deserted it. Alfred Nudd, of Hickling, says that when the birds are mown out in this way they generally desert the nest and make a new one in the side of one of the heaps of fodder as it lies on the marsh. The nest in question appeared to be only a slight natural hollow sparingly lined with bits of dead rushes, and fairly well hidden by overhanging standing herbage of the same kind.

The bird used to nest fairly plentifully in the Orkney Islands, and as late as 1898 a collector took no less than sixteen clutches of eggs. I have met with the species very sparingly in the Outer Hebrides, and years ago it used to breed round my home on the North Yorkshire moors, but has long since been banished by the gamekeeper from the last-mentioned place.



SHORT-EARED OWL'S NEST AND EGGS.

(About one-seventh natural size.)

OWL, TAWNY.

THE Tawny Owl is fairly numerous in many parts of the country, especially where little in the way of game preserving is done. Gamekeepers are often fulminated against for destroying it, by people who fondly imagine that the bird confines its dietary to field mice and voles.

An old watcher told me that he was once puzzled to make out what was going off with his young pheasants, as he felt sure he had next to no vermin of any kind on his beat. One dull evening, whilst sitting near his coops, gun athwart his knees and briar in course of being filled, he saw a Tawny Owl sail noiselessly out of an adjoining wood, snatch up one of his young pheasants, and fly off with it. A long shot killed the marauder on the spot, and when the keeper picked her up the young pheasant was still tightly locked in her talons. Luckily the captive had not been struck by a single pellet of the discharge, and when released ran back to its foster mother, apparently none the worse for its strange experience.

I examined a Tawny Owl's nest, if such the filthy cavity amongst some old hay in a barn loft could be called, containing two half-grown young ones, last June, and found half a wild rabbit about a month old, part of an adult Swallow, the hinder half of a down-clad young Peewit, a portion of a full-grown Missel Thrush, and several beetles. The farmer on whose land the barn was situated told me that he had often known the parent Owls bring their chicks nearly full-grown Lapwings. He further added that about the time the young Owls become fledged and take to the woods, their parents



NEST OF TAWNY OWL.

(About one sixth natural size.)

grow very savage when approached with a dog at heel. A case of a clergyman and others being attacked by a furious member of the species in East Anglia last spring, which was reported in the newspapers at the time, had its parallel in Westmoreland some years ago. A pair of Tawny Owls tenanted an old cow-shed for years together, and laid their eggs every spring in a wooden milk-bowl, which the farmer on whose land they lived obligingly placed for their accommodation in a hay loft. The female knew her benefactor so well, that she would allow him to stroke her back whilst she sat on her eggs, without being in the least disturbed. But one day, just after she had hatched out her chicks, an inquisitive servant-girl visited the shed in order to inspect the down-clad young "oolets." Directly she had mounted a ladder sufficiently far for her head to be on a level with the floor of the loft, the infuriated mother Owl darted forward and buried her talons in the terrified maid's scalp, and nearly destroyed the sight of one of her eyes.

Our illustration was made in the hay-loft of an old tumble-down barn in the north of England, by means of magnesium ribbon, which had to be burnt over a shovel so as to prevent setting the building and its contents on fire.

Although the Screech and Tawny Owls breed in somewhat similar situations, the larger-sized eggs of the latter prevent any mistake in regard to their identity, if the birds themselves should not be seen.

PETREL, LEACH'S FORK-TAILED.

WHILST staying at St. Kilda three years ago, I had several opportunities of studying this interesting little bird. The cragsmen were going to Borera one day after sheep and sea-fowl, so my brother and I arranged to accompany them. Landing was rendered difficult on account of a heavy ground swell rolling in from the Atlantic; however, after a failure or two, we eventually succeeded in effecting our purpose, and, climbing up the terribly steep side of the great crag, arrived at the sloping field of turf tenanted by Puffins and Fork-Tailed Petrels. The former were in plenty of evidence, countless thousands flying overhead and resting upon the ground on every hand, but the latter gave not the slightest sign of their presence. I failed even to detect a single churring note coming forth from the much-tunnelled earth, and yet they were there in fairly plentiful numbers. The St. Kildans professed to be able to tell their burrows from those of the Puffins around them by their smaller size; however, my discrimination was less keen, and I got severely bitten by more than one Tam O'Norrie in my researches.

Altogether I saw the cragsmen take six or seven birds from their nests, and as soon as the gentle little creatures came into the light of day they ejected a quantity of amber-coloured oil. Upon being released some of them flew away seawards with a curious skimming, half-circling sort of flight which it is difficult to describe or liken to that of any particular bird, and others simply scuttled back to the far end of their burrows.

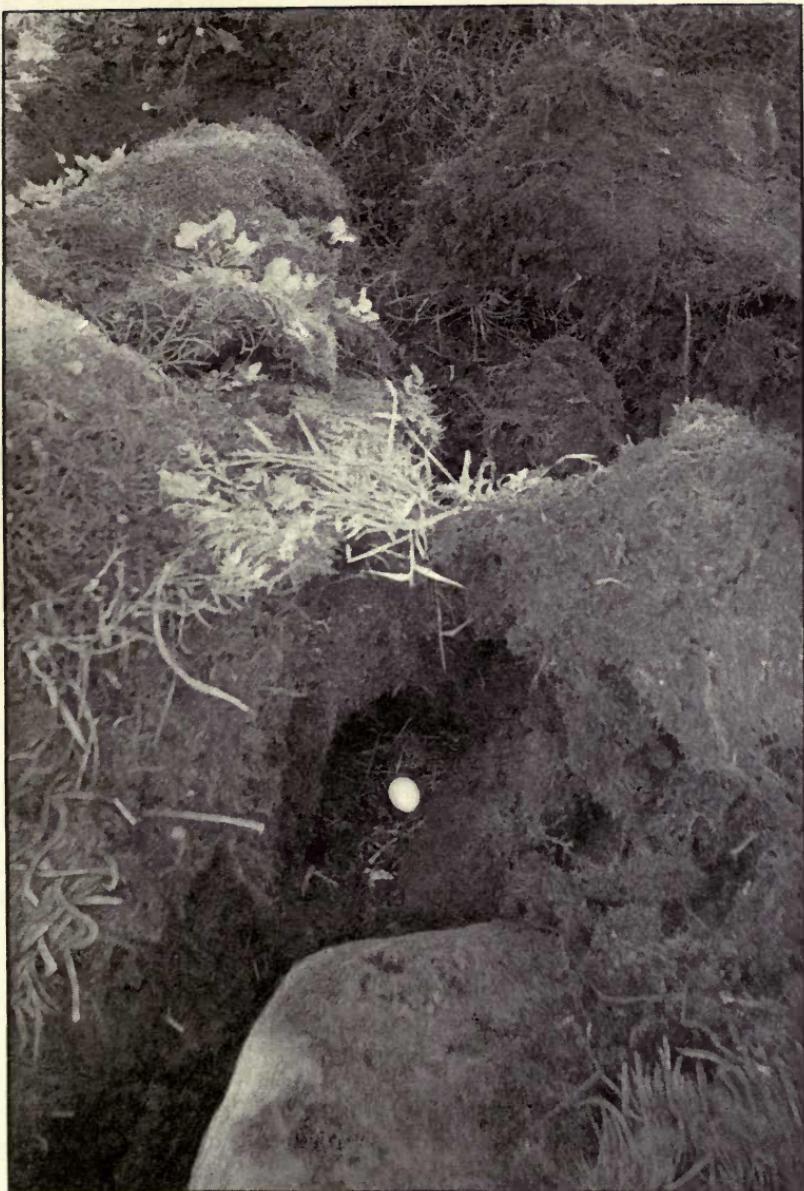
On the top of the Doon, figured on page 79,

we found a small colony breeding to the right of the highest peak. Their burrows were made in the dark half-peat, half-vegetable-looking mould, which we had no difficulty in lifting back in great chunks so as to show the egg lying at the end of the tunnel, and then replacing after the photograph had been taken. In about two-thirds of the nests which I examined the egg was lying on a few blades of dead grass, and in the remainder upon nothing at all but the bare earth.

The Fork-Tailed Petrel breeds at several places in the Outer Hebrides, and on some of the islands off the Irish coast, where it is to be hoped that the collector will not quite extirpate it. An unfortunate circumstance for the species at St. Kilda is that dealers have opened the eyes of the natives to the commercial value of its eggs. These are white, speckled round the larger end with minute rust-coloured and greyish-brown spots. Their larger size than that laid by the Stormy Petrel, and the presence of the close-sitting parent bird, readily identify them.

PETREL, FULMAR.

I HAD many excellent opportunities of studying this bird whilst staying in St. Kilda some years ago, and became greatly in love with its beautiful flight and gentle manners. Upon approaching its breeding-haunt the naturalist is soon attracted by the Fulmar Petrel's graceful gliding flight and almost abandonment of wing-flapping, which apart from other differences distinguish it at once from

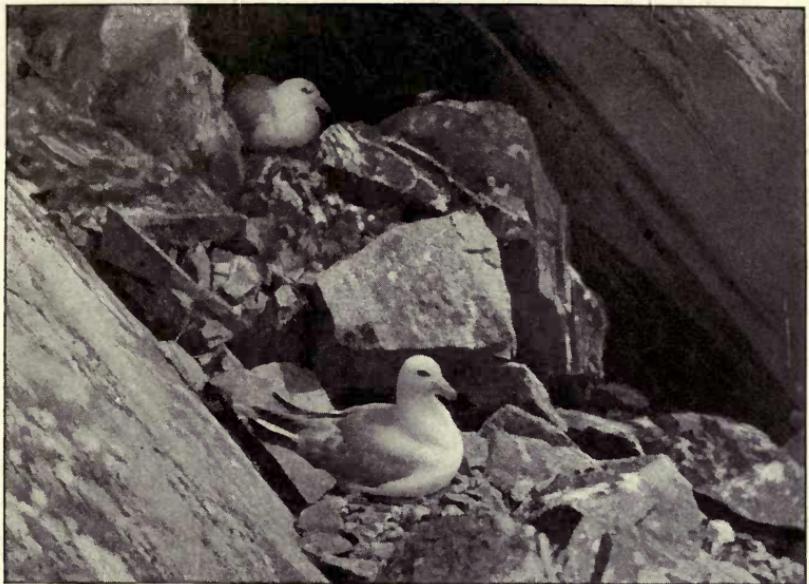


LEACH'S OR FORK-TAILED PETREL'S NEST AND EGG.

(About one-seventh natural size.)

the Gulls. I often sat for hours together upon some advantageously situated crag, and watched the males feeding and toying with their brooding mates as they sat on the ledges or steep grassy slopes of the stupendous cliffs. One of the bird's strange peculiarities is that it is seldom seen flying over even the smallest point of land, so that upon arriving in Village Bay and climbing to the top of the cliff immediately behind the dwellings of the St. Kildans, the visitor is struck by the entire absence of the species, even when he is within a hundred yards of thousands upon thousands sitting on their nests, or sailing along on outstretched wings in front of the dizzying precipice. Upon looking over, the birds may be seen sitting amongst the sea-pink and grass growing on ledges and unreadable slopes, in such vast numbers that they look like small fields of daisies. Although the majority of birds nest in such situations, many of them drop their single egg in a little hollow scratched in bare earth, or amongst small stones and chippings on a ledge or in a crevice of rock. In spite of the fact that the nests were in the most fearsome situations, by dint of care I succeeded in getting down to several and examining them without the aid of a rope, and my brother secured the illustrations on the opposite page in Soay, without any help; but, frankly speaking, such work is only for cool heads and strong limbs, in addition to some previous experience in crag-climbing.

The Fulmar Petrel has within recent times established itself in Foula, and whilst in the Shetlands in 1898 I saw it breeding in the cliffs of Unst opposite the Muckle Flugga Lighthouse, where its eggs were taken a day or two after



FULMAR PETRELS.

(About one-fourteenth natural size.)



EGG OF FULMAR PETREL.

(About one-eighth natural size.)

our visit. I have no doubt that before long it will be found breeding in the Outer Hebrides, where I suspect it used to do so in times gone by.

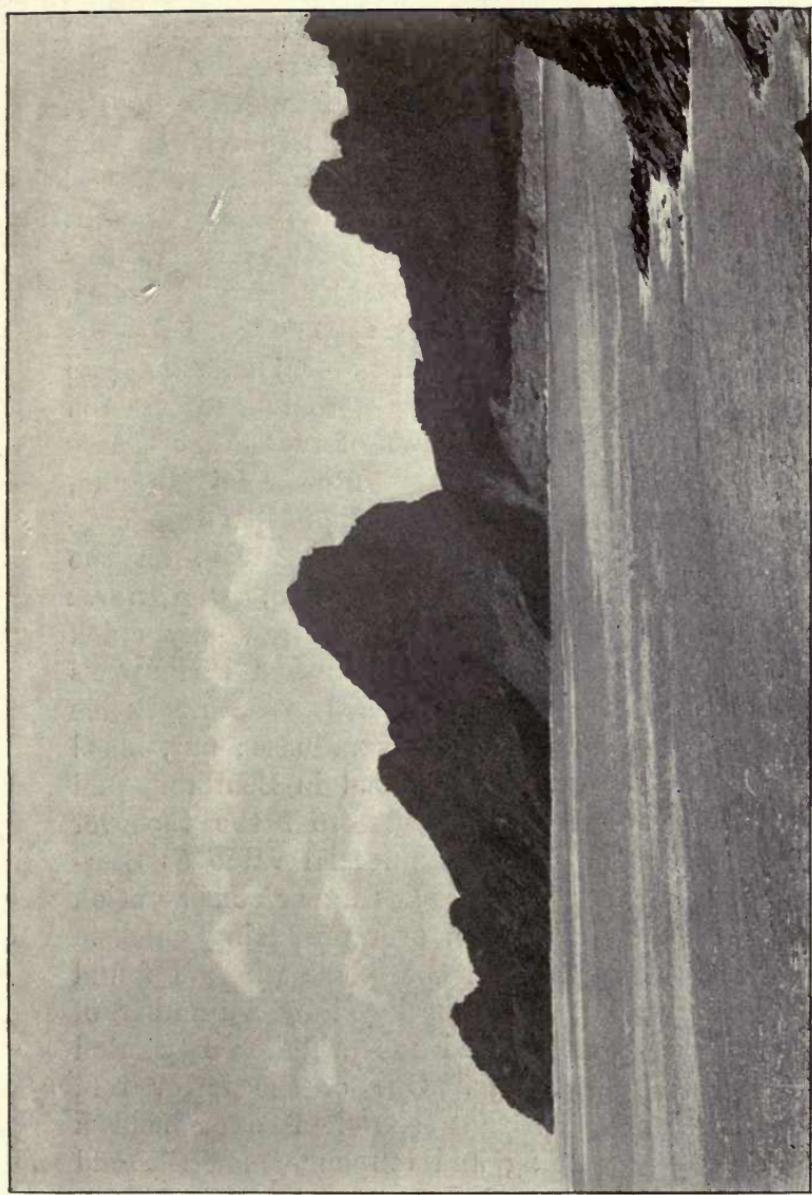
The egg is white and rough, and the strong odour always present on it prevents the possibility of a mistake in identifying it.

PHALAROPE, RED-NECKED.

THE Red-Necked Phalarope comes well inside the first dozen British birds most persecuted for the sake of their eggs. I spent a considerable amount of time studying it in one of its old Hebridean breeding haunts, where it is receiving shameful treatment, last June, and was simply charmed with it.

The bird-lover's moments of ecstasy are always great upon beholding for the first time the living representatives of some rare species about which he has read and dreamed for years; and the confiding nature and interesting habits of this elegant little wader positively captivate the naturalist, especially if he has sought for it, as I have done, throughout some of its ancient summer homes in vain.

As I mentioned in my recently-published work, "Wild Life at Home," the last pair of Red-Necked Phalaropes attempting to breed in Unst, where the late Dr. Saxby met with them, had been shot by a local gunner—a week before my brother and I arrived in the Shetlands last year—in defiance of the law protecting the species. A collector was found some years ago waist deep in



THE DOON, ST. KILDA.—HOME OF THE FORK-TAILED PETREL, MANX SHEARWATER
AND FULMAR PETREL.

a North Uist bog, where the bird still lingered, impudently blazing away with a double-barrelled gun, and not a single Phalarope has ever been seen there since. The same fate has, I fear, pursued the representatives of the species in another of the Western Isles, where a despicable individual took advantage of the poor bird's absurd tameness, and tried his best to extirpate it with a catapult. It is really a wonder to me that there are any birds living at all in some parts of the Hebrides, for every man's hand appears to be turned against them, and all eggs of any size worth consideration have been for a long time gathered for human consumption. I saw children of incredibly tender years drive their bare heels into a marsh and, when the water had welled sufficiently, drop eggs in to test their freshness; and was told on the very best authority of a shepherd, who never troubled even to do this, but ate raw any chick he found in an egg. The Red-Necked Phalarope's eggs were at one time regarded as a negligible quantity on account of their smallness; but, alas! the bagman is very much abroad in Scotland, and when he can extract a profit from the turnover of things of such small commercial value as Starlings' eggs, those of the species under consideration have but a poor chance of ever producing chicks.

Directly I approached the place where I found the bird breeding, I was besieged by a number of boys and girls who asked me whether I wanted to buy Phalaropes' eggs. One of the latter told me rather boastfully that she had once sold a clutch for one shilling and tenpence, and the odd twopence off the round sum plainly indicated to me the business acumen of the pedlar. During my stay I saw members of both sexes and all



NEST OF RED-NECKED PHALAROPE.

(About two-sevenths natural size.)

ages, from lisping little toddlers to grey-headed old men and women, systematically searching the environs of the marsh for eggs, and it is surprising that any birds should be left to come back summer after summer to attempt the almost hopeless task of perpetuating their species.

The particular locality in which the birds live is the arm of an old loch which has become silted up, and has the bare suggestion of a stream running through it with a number of small shallow pools on either side. The whole bog can be easily waded, although I floundered into a deep, treacherous hole once or twice, to the wetting of my much-upturned trousers.

Whilst standing on the edge of the swamp during my first visit, I saw two birds about the size of a Dunlin engaged in combat. Turning my field-glasses upon them, I was delighted to find that they were Red-Necked Phalaropes. Swimming round and round each other they charged angrily two or three times, when one of them, evidently considering that he had had enough of that sort of recreation, flew away, and left his enemy with what I judged to be a female, from her greater richness of coloration and slightly larger size. Altogether I saw five birds at that particular spot, which appeared to be the principal rendezvous of the whole stock. They swam about close to me with the utmost assurance, and fed with an energy approaching that of Starlings. Several times I saw them leap up to catch some insect resting high on a rush stem. The odd bird was evidently an unpaired individual, for every time he swam too near the others he was promptly beaten off. The pairs generally fed close to each other, and if they chanced to

get separated, called in a low, stirring kind of note.

I saw two nests containing four eggs each. One of them was situated on dry ground some sixty yards from the bog, in a tuft of grass that might not unreasonably have been expected to hold a Lark's nest, and the other in a tussock growing on what had once been probably the foundation of a boundary fence running right into a part of the marsh. Both nests were lined with fine dead grass, and differed little from those of the Meadow Pipit, except that they were not quite so tidy and symmetrical. The latter of the two was close beside a little muddy pool, from which its owner evidently walked on to her eggs, as they were besmeared with mire.

One of the nests I have mentioned had already been robbed, but I induced the possessor of the eggs to allow them to be put back in order that I might photograph them. The other I tried my best by a system of periodic bribery to save, but it was of no use. I gave the two lads who found and showed it to me some money to allow the eggs to remain in it, promised them some more if I found everything in order on my next visit, and was going to leave some money with a local gentleman to give to the lads when the young Phalaropes had been hatched. I visited the nest one day when the boys were likely to be in school, and found the eggs gone, and seven birds on the pond where I had previously only seen five.

The natives assured me that when the bird is robbed of her first clutch she invariably lays again, and it is to be hoped with more chance of escaping detection and robbery on account of an increased wealth of vegetation.

Although it has repeatedly been stated that the Red-Necked Phalarope has ceased to breed in the Orkney Islands, I have the most reliable evidence that this is not a fact. A friend, who is a recognised authority, has told me of a place, which he rightly regards as sacred, where at least half a dozen pairs still breed, and there is no mistaking either the bird or its small pyriform eggs, which I hope before very long to see effectively protected.



RED-NECKED PHALAROPE AT HOME.

(About one-ninth natural size.)

PLOVER, GOLDEN.

ELEVATION seems to make no difference to the breeding requirements of the Golden Plover, so long as wild boggy heath or rough moorland is present. I have met it breeding close by the sea, and on mountain-tops between two and three thousand feet in height. Although common enough in nearly all suitable districts throughout the United Kingdom, I have within recent years noticed a considerable decrease in its numbers throughout some old breeding-haunts both in England and Scotland. Whilst in the Shetlands in 1898, we met with a few pairs, but considering the suitable nature of some of the ground we were on, they could not be called anything but scarce.

As a rule, the Golden Plover does not make much of a nest. Sometimes its eggs are almost standing on their sharp ends in a cup-shaped hole amongst closely-cropped heather, with very little in the way of a lining, and at others lying in a slight hollow amongst rough bent grass and coarse moss, and lined with bits of dead herbage picked up close by.

The larger size, and buff instead of olive ground colour of the eggs, and the character of the country upon which they are laid, as well as the usual presence of the birds, easily distinguish them from those of the Green Plover.

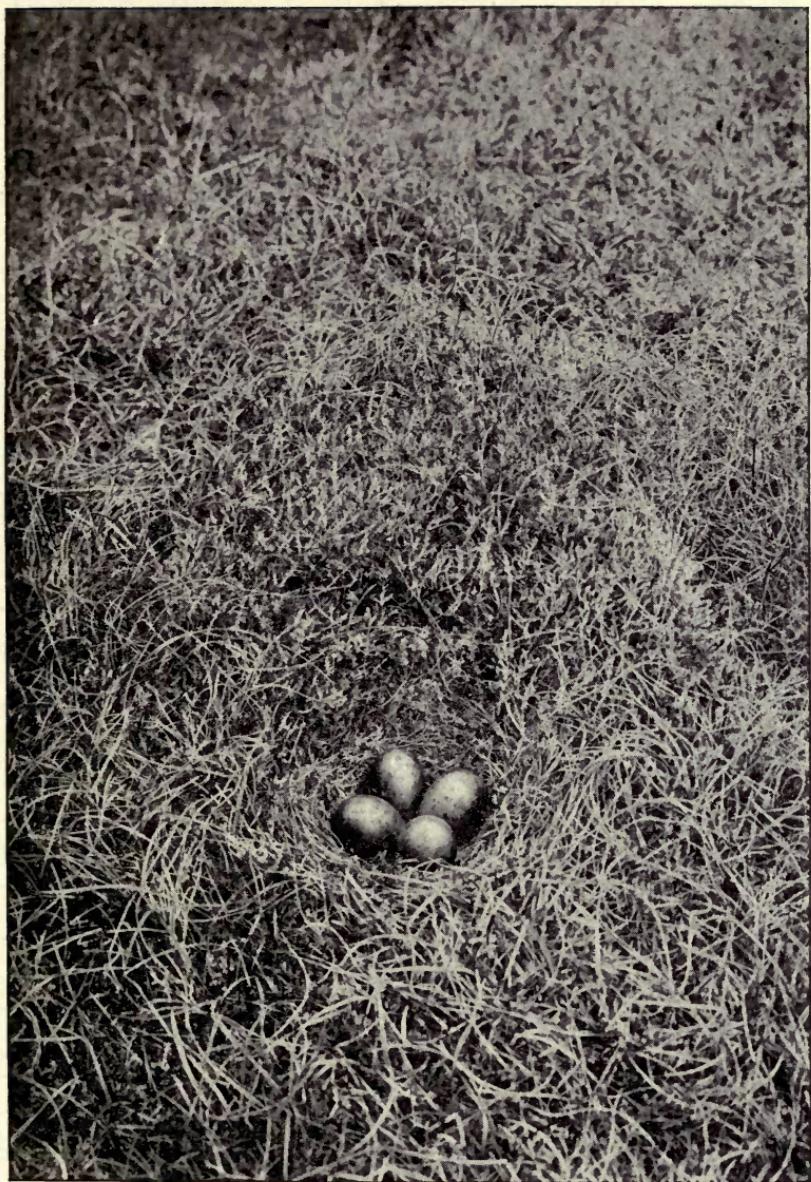
The photograph from which our illustration has been reproduced was taken on the Westmoreland hills, close to Nine Standards, where the bird has decreased, from some cause or other, during the last fifteen years, to a considerable extent. My brother and I only found two nests during a whole day's search in the spring of 1897, although we discovered a good number of Dunlins' nests.

PLOVER, KENTISH.

ALTHOUGH the particular breeding haunt of this rare and interesting little Plover is well known to most practical ornithologists in this country, I will not help to hasten its destruction by giving any particulars calculated to recruit its already large enough army of persecutors. I had the good fortune last May to find three pairs, and watch them a whole day upon the burning shingle thrown up by long-past Channel storms. They are easily distinguished from the Ringed Plover by their smaller size and lighter colours, and are moreover shyer and less demonstrative when their eggs are approached.

Whilst tramping along the beach, my guide and I frequently peeped over a high ridge of sand dividing the sea from the great shingle flats where the birds breed, to see if we could mark a female leaving her eggs. After a long and tiring journey we had the good luck to see a bird rise some fifty yards from us, and, flying a little way off, alight and behave in a sufficiently suspicious manner to warrant us in believing she had eggs. She had no doubt run some distance before rising, so we did not go in search of her precious charge, but lay down to watch. My companion, who had studied the bird and its habits all his life, told me that hot weather such as we were then having was the very worst during which to watch a Kentish Plover on to its nest, and showery weather the best. He also added that the number of young birds that actually get away varies considerably nearly every season.

The individual we had under observation stood some hundred yards off for a few seconds, uttering



GOLDEN PLOVER'S NEST AND EGGS.

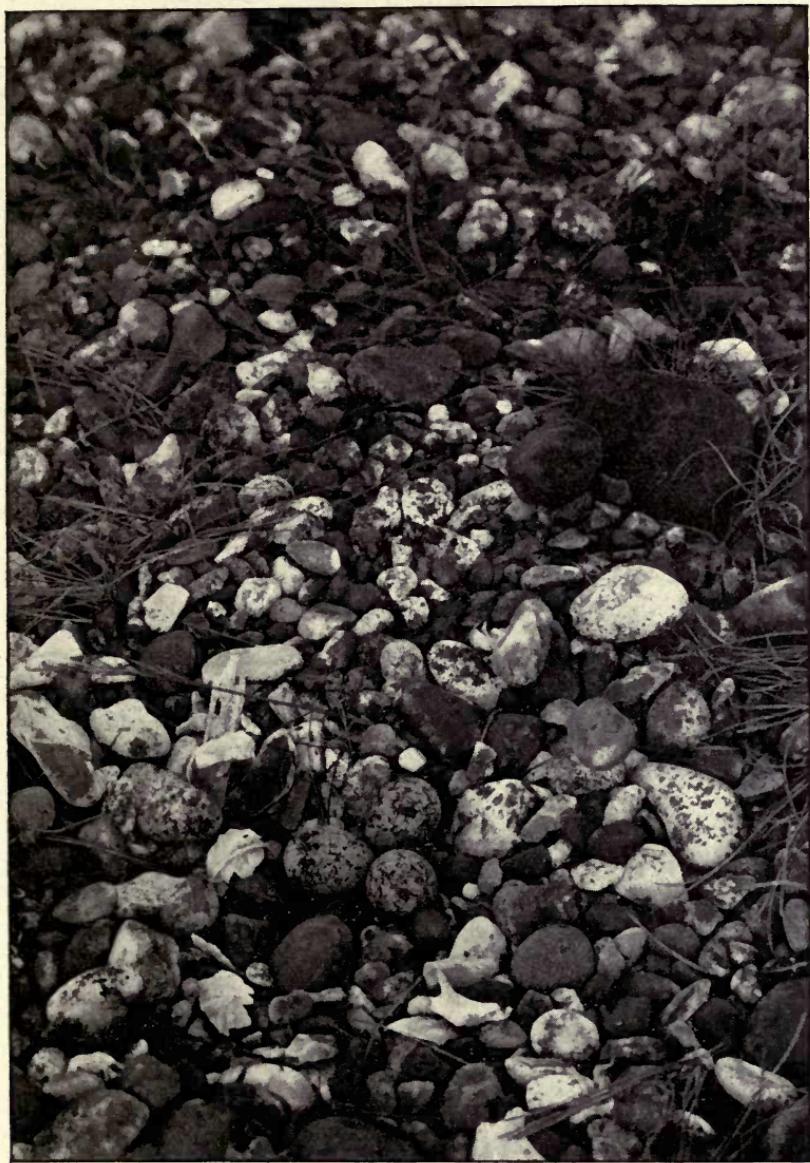
(About one-sixth natural size.)

her plaintive note, which quickly brought her mate to her side. Together they ran along a grass-grown ridge commanding a good view of the whereabouts of their eggs, flew to another ridge, ran about for a while and then returned, occasionally varying this behaviour by flying right over us, and whistling as if to tell us she knew we were there. We waited for hours in the broiling sun, which heated the vast plain of shingle until my field-glasses became utterly useless on account of the dazzling radiations. At last the bird retired to her treasure, and jumping up we saw her run a little way and then take wing and join her mate on a little plot of short herbage some hundred yards away.

We soon had a sight of the beautiful little eggs lying in a slight hollow amongst the shingle, with which they harmonised in the most astonishing manner.

The three pairs of birds I saw appeared to be extremely local in their movements. I tried to walk one of them off a limited piece of ground on which they evidently had eggs, but in vain. They ran along in front of me for some distance, then flew a few yards, alighted again, and rising, circled round to the place where I had originally disturbed them, all the while uttering their soft, plaintive whistle.

The eggs of the Kentish Plover are easily distinguished by their pyriform shape and scratchy markings from those of the Lesser Tern, breeding upon the same ground, and there is not much chance of even the tyro mistaking them for the eggs of the Ringed Dottrel.



KENTISH PLOVER'S EGGS.

(About one-third natural size.)

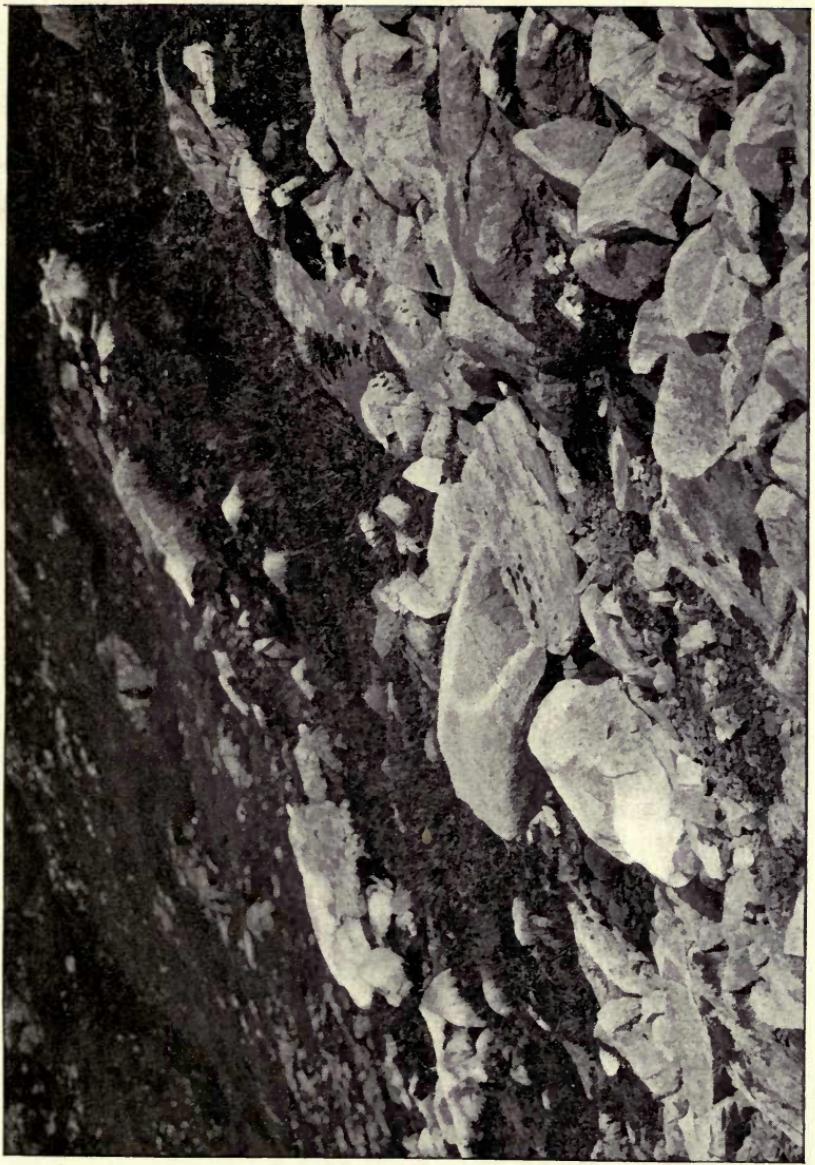
PTARMIGAN.

THE Ptarmigan is essentially a bird of the mountain and the mist, although under ordinary conditions of weather it does not appear to wander far below an elevation of two thousand feet, or above one of four thousand in this country. Indeed, old Highland gamekeepers have told me that it is not often met with on the summits of mountains reaching an altitude of three thousand odd feet, even where it is fairly plentiful on their slopes.

It maintains a struggling and somewhat precarious existence on some of the Hebridean islands, such as Mull, Jura, and Skye, and seems to be scarcer on mountains of the mainland near the Atlantic seaboard than those further removed from it.

We were unfortunately late in reaching the haunts of the species near Ben Nevis last spring, but although we did not succeed in finding exactly what we wanted, my brother managed to secure some very characteristic pictures of the bird and its surroundings, one of which is here-with reproduced.

The finding of the almost full-grown young bird crouching amongst the grey stones in our illustration, which I ought to point out somewhat severely localises its whereabouts, will convey an excellent idea of the difficulties of discovering a hen Ptarmigan sitting on her nest. As an example of how the bird trusts to escaping detection by the harmonisation of its plumage with surrounding objects, the mother and other chicks were crouching behind a stone on the hither side of the one in the picture at the time



PTARMIGAN'S NEST
(About one-twentieth natural size.)

the photograph was taken, and did not stir until positively obliged to do so.

The nest is a slight hollow scratched in the ground, generally in the shelter of a stone, and scantily lined with a few bits of dead grass, and feathers after five or six eggs have been laid.

The eggs number from seven to ten or twelve, varying in ground colour from greyish - white to pale reddish-brown, spotted and blotched all over with rich dark brown. They are not so profusely marked as those of the Red Grouse, and their ground colour is more buffy.

REDPOLL, LESSER.

ALTHOUGH the Lesser Redpoll has its head breeding quarters in Scotland and the north of England, its nest has been found in almost every other part of the United Kingdom where suitable conditions for its existence prevail. It is also said to be more numerous as a breeding species in the north than in the south of Ireland. I have met with it in different parts of the country under circumstances which left no doubt that it was breeding in the neighbourhood, but have seldom seen its nest.

Our first illustration, representing a nest in a birch - tree, was obtained in an east Norfolk copse, and the second, showing the eggs, at Rainsworth Lodge, Nottinghamshire.

The nest is placed in all sorts of trees, such as firs, elms, alders, hawthorns, and willows, at varying heights from the ground. Occasionally it has been met with even amongst heather stalks.



NESTS OF LESSER REDPOLL.

(About one-fifth natural size.)



It is a pretty little structure, built with dry grass, stalks, moss, and rootlets on a foundation of slender twigs, and lined internally with willow down and sometimes hairs and feathers. The interior is deep, smooth, and beautifully shaped.

The eggs, numbering from four to six, are of a very pale bluish-green ground colour, spotted with orange-red about the larger end, and sometimes streaked with dark brown. In addition they are also marked with an underlying colour of pale greyish-brown.

The smaller size and black chin of the parent bird readily distinguish the nest from that of either the Twite or Linnet.

REDSHANK.

THIS bird is by no means rare, but, in spite of being a tenacious lover of favourite old breeding-haunts, is gradually being banished from some of them. On Herring Fleet Marshes it is estimated that it has decreased two-thirds during the last ten or fifteen years. I have visited its nesting-grounds in Norfolk, Suffolk, and Westmoreland. In the last-mentioned county a small colony has lived all the year round for some time in a secluded little valley not far from Kirkby Stephen. I visited the place last spring, and found five or six pairs living on a few acres of peat bog covered with rushes, bent grass, and fringe moss, drained by a small, sluggish stream. They were surrounded by dry hills and rocks, and one could not help wondering why they had established themselves at such a spot, when there were



REDSHANK'S HAUNT.



REDSHANK'S NEST AND EGGS.

(About one-fifth natural size.)

hundreds of apparently more likely situations in the neighbourhood. I did not see a member of the species in the Shetlands in 1898, although Mr. J. J. Baldwin Young tells me it is abundant in the Orkneys. On one occasion he spent a month there during the breeding season, visiting nearly all the islands in the group, and only failed to meet with it on a single day.

The Redshank is easily distinguished by its oft-repeated, shrill, and discordant note, which it never fails to utter whilst flying overhead whenever its breeding-grounds are visited. It varies its habit of flying noisily overhead by alighting on some rail, wall, or other eminence, and swaying its body up and down as if it were on springs, in the most Sandpiper-like manner. Sometimes it will hang in the air for a few seconds against a breeze, with its head pointing skywards, and its tail towards the earth, and vibrate its wings very rapidly.

Its nest is usually a deep cup-shaped depression in a large tuft of coarse grass, some of which overhangs and hides it; the centre of a bunch of rushes, or under a tuft of heather. Personally, I have only seen it in situations of the two former kinds. It is very sparingly lined with a few blades of dead grass. The bird has a habit of scratching out several spare nesting-sites not far from the one adopted. When placed amongst an abundant growth of coarse marsh grass, the nest is not easy to find, and the best plan for the student to adopt is to go out early in the morning, when a heavy dew will invariably enable him to trace its whereabouts.

The eggs, four in number, are easily distinguished by their buff ground colour and bold markings.

ROCK DOVE.

WHILST in the Hebrides last summer, I was, during a spell of calm weather, able to explore several caves on the Atlantic seaboard and examine numbers of Rock Doves' nests therein at leisure. In one quite small and dome-like cavern I found every available ledge utilised, and quantities of building material lying on the floor of the cave told of impossibly narrow shelves of rock above having been tried as lodgments for a nest.

When Odin, the Viking king, leapt at a bound from the famous seal-clubbing rocks of Hysgier, some eight or nine miles to the west of the Outer Hebrides, in order to escape the fury of his irate queen, and alighted upon the shores of North Uist, his heels, according to tradition, smote the ground so sharply that he broke chimney holes in the roofs of a couple of sea-hewn caves. I visited the bottoms of both these pits, and found a number of Rock Doves' nests, from which the owners thereof dashed in great haste, a very solicitous mother Rock Pipit, and ample evidences that a pair of disappointed Ravens roosted therein. My friend, Hector H. Mackenzie, of Balealone, kindly acted the part of guide to these somewhat nether regions, which form splendid timber traps during winter gales. Whilst we were engaged picking up Ravens' feathers the birds came along, and my friend told me of the damage the pair had wrought him by attacking the tongues and eyes of partly-born lambs whose mothers were *in extremis*.

It was near to the holes made by Odin's heels that we obtained the photograph of a Rock Dove's nest herewith reproduced. The bird sat very closely on it, and when disturbed darted out like

a flash of lightning, her white rump showing up well against the black rocks, and thus easily distinguishing her from her sister the Stock Dove. The nest had originally contained two eggs, but a Grey Crow hovering round the neighbourhood, and a sucked egg on a crag close by, told their own tale.

Some of the nests which I examined were made almost entirely of dried seaweed, with an inner lining of dead grass; and others consisted simply of a few roots gathered from an adjoining field, with a very scanty lining of dry herbage.

The bird is not at all loved in the Western Isles, on account of the harm it does to farm crops.

SHAG.

THIS bird is common enough round our coasts, wherever suitable breeding accommodation is obtainable. It is a lover of caves and crevices in maritime cliffs. I have found it nesting in caves, vertical and horizontal fissures, under loose boulders, on shelves that were sheltered by overhanging crags, and in perfectly exposed corners, all within one hundred yards of each other. It is easily distinguished from its near relative, the Common Cormorant, by its smaller size and green colour.

The outer structure of its nest is generally composed of seaweed, but this is sometimes supplemented by sticks and twigs, and I have seen even the skeleton and wings of a Kittiwake doing duty in this respect. The interior is lined with grass, and at one breeding station which I visited in the Shetland Islands, the birds appeared to have taken



ROCK DOVE'S NEST AND EGG.

(About one-ninth natural size.)

a great fancy for decorating their nests with the green stems, leaves, and flowers of the pink campion. They had gathered it from some ledges on which it grew not far away, and although quite fresh, it was lying beneath eggs in all stages of incubation. According to my experience, even where a situation admits of a bulky structure, the nest is never quite so large as that of the Common Cormorant.

The eggs of the Shag number from two to five, and are slightly smaller than those of its congener just mentioned. They are elongated in shape, and encrusted with a coat of chalk, which, when scraped away, reveals the pale green shell beneath. I cannot say that I have noticed the considerable variation in their shape commented upon by some naturalists in describing the eggs.

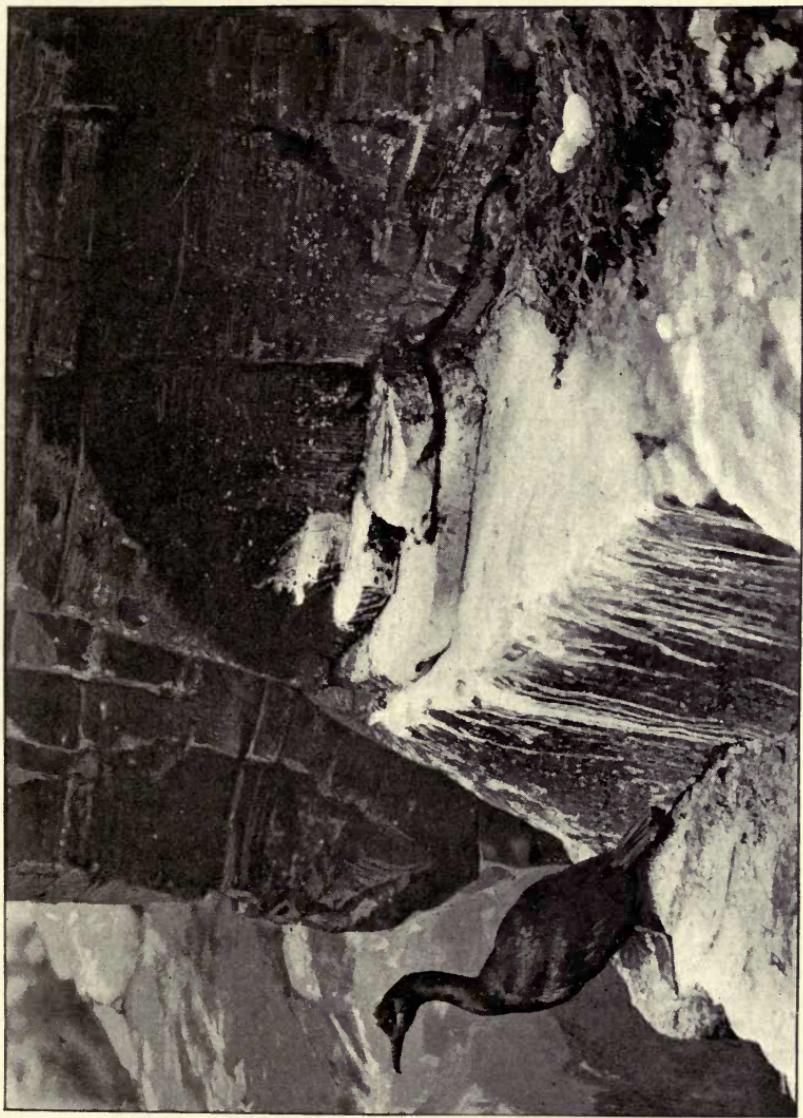
The bird is a close sitter, and as a result I carry one or two memento scars, from forcible removals from crevices, upon my hands.

Young Shags when hatched have not a particle of down upon their little black shiny bodies, a circumstance which renders them strangely suggestive of the nigger tribe.

The illustration of an adult bird and her nest, with its guano-splashed surroundings, was secured at the Noup of Noss by careful stalking.

SHEARWATER, MANX.

ALTHOUGH banished from some of its old breeding-haunts by rats and Puffins, and harried in others by collectors and natives, who rob it of its single egg in the former case, and of its young one in the latter directly the chick has arrived at a



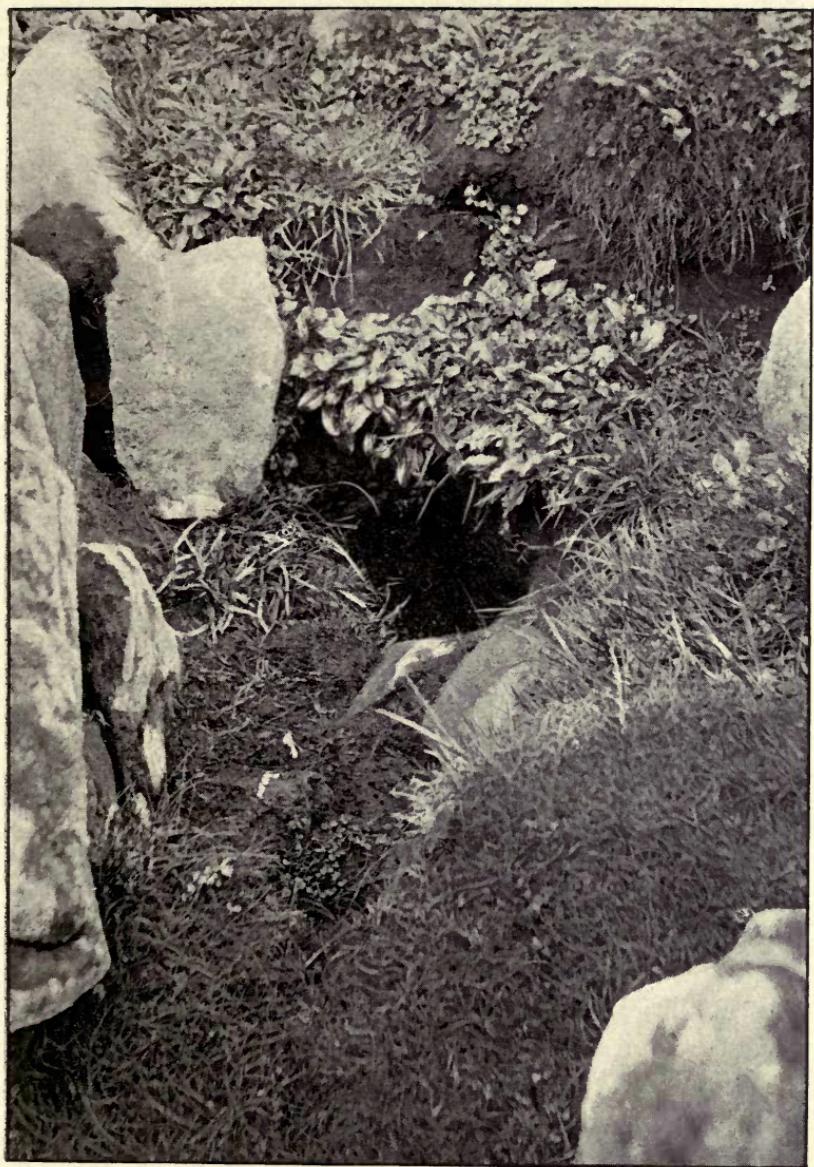
SHAG AND NEST.

(Eggs about one-eighth natural size.)

suitable age and condition for the table, the Manx Shearwater is likely to hold its own for some time to come as a British breeding species.

When at St. Kilda in 1896, I met with it breeding in very limited numbers on the Doon, below the ground occupied by the Puffins and Fork-Tailed Petrels, and my brother secured the picture on the opposite page of a burrow from which a bird and its egg had been taken a day or two before our arrival. The hole had been scraped out of the rich vegetable mould between boulders of rock, and it and others in which birds were in all probability sitting at the time were surrounded by luscious grass, of a most delicate green, and sorrel. I was anxious to go over at night in order to listen to the guttural melody of the brooding birds, which the natives told me could generally be heard, but unfortunately an opportunity never presented itself. During my stay I investigated the islands of St. Kilda and Borrera with some degree of thoroughness, but never found a single nest. I had, on account of the freshening of the wind and the rising of the sea, unluckily to leave Soay (where Dixon says a large colony breeds) too suddenly to do much, except catch a young St. Kilda Wren and get a fine sight of the wild sheep on it.

Within the last decade, my friend Mr. Harvie-Brown has seen flocks aggregating thousands all feeding together in Scottish waters; and in "A Fauna of Argyll and the Inner Hebrides," published in 1892, gives a most interesting account of his visit the previous year to what he regards as the "great headquarters" of the species in Scotland. The colony, which is situated in Eigg, occupies five or six miles of cliff face, some of



MANX SHEARWATER'S NESTING HOLE.

which, luckily enough, cannot be visited by even the most daring cragsman on account of its rotten character.

The Manx Shearwater breeds fairly plentifully in the Scilly Islands and in suitable places round the Irish coast, in addition to the west side of Scotland, where it patronises the Inner Hebrides principally. It also rears its young in the Orkney and Shetland Islands.

The nesting burrow is said to be invariably dug by the bird itself, and the single smooth white egg is—like that of its near relative the Fork-Tailed Petrel—sometimes laid on a few blades of dead grass or fern fronds, and at others on the bare mould.

SISKIN.

ALTHOUGH numbers of Siskins are no doubt caught every winter in England, to supply the demand for them as cage pets, in which capacity they are great favourites, I think these chiefly belong to the continental species, roaming from place to place in search of food.

The nest has been found very sparingly in various parts of England from time to time, but in Scotland it breeds regularly in many of the great pine forests so well suited to its habits. I have heard that its breeding numbers are decreasing in that country, but the increase of timber land and game preserving one would think ought to help it, and whilst in some of the great Highland forests last spring, I could find no evidence of its diminution. But, of course, precise evidence in regard to a bird of its rarity and habits is obviously difficult



SISKIN'S NEST AND EGGS.

(About one-fourth natural size.)

to obtain. It breeds regularly in Ireland, where my brother photographed two nests at Cappagh in 1896 by the aid of a very long ladder, several strong guide-ropes, and a small army of men, and Mr. Ussher tells me in a letter that a pair nested again this year in the same locality.

The nest is generally placed on the branch of a fir at a considerable height from the ground, although specimens have been found in England in such lowly growths as juniper and furze bushes. It is composed of slender twigs, dried grass, and moss, lined internally with vegetable or animal down, and occasionally feathers.

The eggs, numbering from four to six, are greyish-white tinged with pale bluish-green or blue, and speckled and spotted with rusty and dark brown, and occasionally streaked with the darker colour. Generally the markings are scattered over the surface, but sometimes they form a zone at the larger end. The eggs resemble those of the Goldfinch very closely, but the presence of the parent bird will, of course, always settle any doubts as to their identity.

SKUA, GREAT.

THIS bird supplies a most striking object lesson of what may be accomplished in the saving of a species from extinction by a measure of effective protection during the breeding season. In the late Dr. Saxby's time there were some six or seven pairs of Great or Common Skuas breeding on the top of Herma Ness, in Unst, and he expressed a fear that the banishment of even these was but a



GREAT SKUA GETTING READY TO ATTACK.



GREAT SKUA'S NEST AND EGGS.

(About one-seventh natural size.)

question of a few years. His relatives the Edmondstons, of Baltasound, however, very laudably took up the preservation of the birds, and, building a wooden hut on the most commanding part of the ground which they tenanted, placed a watcher in it every spring to look after them and their eggs. The success of this measure has been so great, that when my brother and I visited the place last year there were no less than thirteen pairs of birds nesting on the property. The species also has a colony in Foula, where, I understand, effective protection to its members is afforded during their stay upon the island every spring and summer. This is altogether delightful, for the naturalist who visits the breeding-haunt of the Great Skua during the month of June is never likely to forget his experience. There is something so bold and dashing about this fierce buccaneer of the air, that it appeals to the imagination and impresses itself upon the memory in a way that, so far as my experience goes, no other British species can succeed in doing.

When my brother and I arrived on the rough bent-clad hillside upon which the majority of the birds breed, our friend Mr. Laurence Edmondston, who is worthily carrying out the traditions of his forbears, asked his keeper to show us a number of the nests under his charge. Whilst we were all standing round one, its owners would never dream of attacking, but directly a single individual only was left, down swooped the birds with terrific fury. I was anxious to find out one or two things, and succeeded in doing so. First of all, I imagined that I was gifted with nerves sufficiently strong to allow my reason to defy my primitive instincts of self-preservation, but the

Great Skua completely undeceived me. When the birds dashed upon me, the sound of their wings at close quarters was like the rush of an express train, and do what I would, I could not avoid involuntarily ducking my head in order to escape being struck, for a considerable time. Upon gaining sufficient mastery over my feelings to stand perfectly still, I had my cap knocked off several times over by blows which, when striking rather low down, stung badly. The method of attack is to swoop from a considerable height at a terrific speed, and when sufficiently close to the intruder's head, to drop both feet and hit him with their fronts on the back of the head. As soon as the blow has been delivered the birds shoot upwards, and circle round for a fresh attack. They never strike the object of their resentment face on. I tried by wheeling round quickly to get them to do this by the calculation of time, but, however close, up they shot, and sailed away with outstretched wings, as seen in our illustration.

All the nests we examined were made of dead grass and bents in varying quantities. In nearly every case a mock nest had been built not far from the one containing eggs, and the birds have been known, when an original nest became flooded through heavy rains, to convey their eggs to the supplementary structure.

The eggs, as a rule, number two, but occasionally only one, varying in ground colour from light buff to dark olive-brown, spotted and blotched with dark, rusty, or greyish brown, and are easily identified by the presence of the savage parent birds.

SPARROW, TREE.

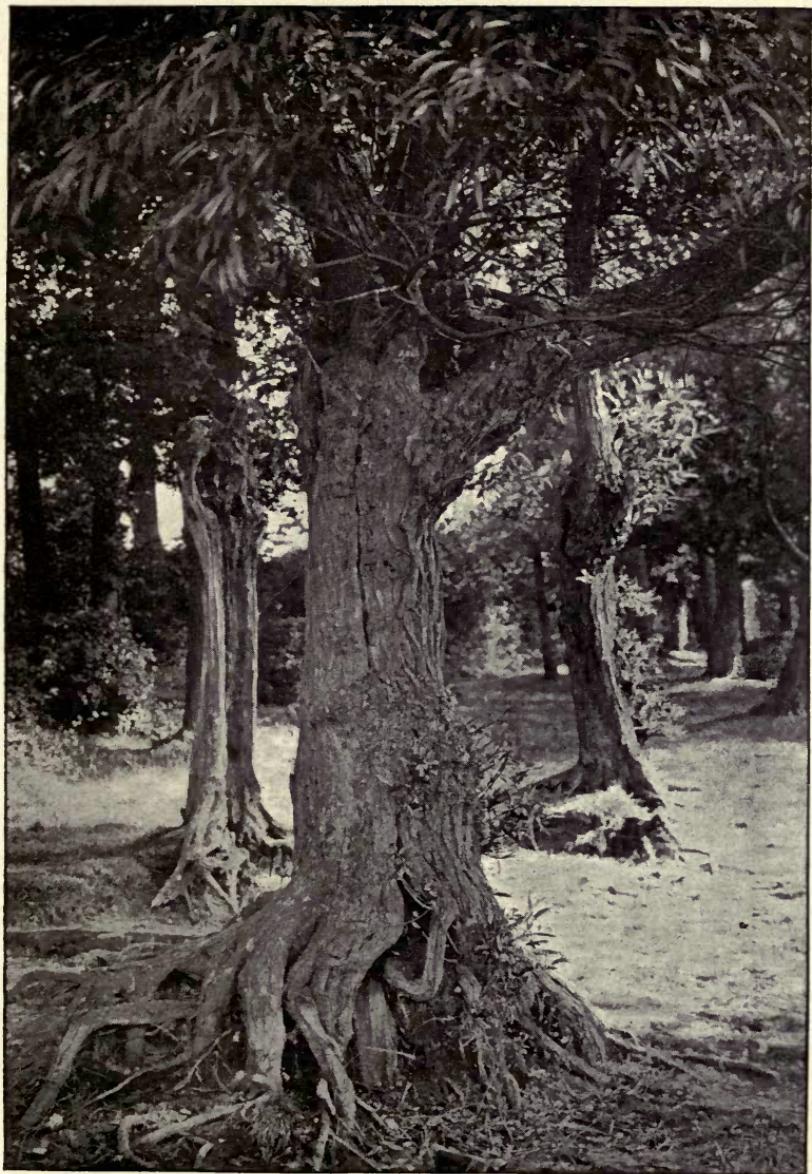
THE more extended my investigations into the bird life of this country become, the more convinced am I that the Tree-Sparrow is less rare than it is generally supposed to be. Its notes, habits, and appearance bear such a general resemblance to those of the House-Sparrow, that there can be no doubt its presence is overlooked by nearly all but practical ornithologists.

Whilst at St. Kilda in 1896, I saw quite eight pairs of Tree-Sparrows, and succeeded in finding four nests, two of which were situated in dry walls, and the remainder in the cliffs on the east and west sides of Village Bay. They all contained young ones, which I handled in three out of the four cases. I have also met with the bird once or twice in the Outer Hebrides, and last summer had a good opportunity of studying two pairs nesting in the chimneys of a farmhouse in which I was staying in North Uist.

A few years ago I fell in with a colony of three or four pairs breeding in holes in the trunk and branches of a dead tree in a lonely, out-of-the-way part of Hertfordshire, but upon returning the following spring I was sorry to find that the tree had been blown down.

Our picture was also secured in the same county. I watched the birds build their nest, which was a surprisingly small one, in a hole in the tree figuring in the foreground of the illustration, and afterwards discovered that it contained no less than eight eggs, the highest number recorded, I believe, for the species.

The nest is composed of straws, dry grass,



TREE SPARROW'S NESTING SITE.

rootlets, hair, and feathers, and is a loose and truly Sparrow-like structure.

The eggs are slightly smaller than those of the House-Sparrow, which they resemble, however, so closely in coloration that I would not undertake to differentiate them without seeing the parent birds. At close quarters, or by the aid of a moderately powerful pair of field-glasses, there is little difficulty about identifying them; for amongst other differences in the breeding plumage, the crown of the male Tree-Sparrow is reddish-brown and the House-Sparrow ashy grey; and, more important still, whilst both sexes in the former species have a black throat, only the male of the latter is so adorned.

TERN, LESSER.

WE have obtained photographs of this bird's eggs both on the Norfolk and Kentish coasts. At its principal station on the former it is at least holding its own, on account of the practical character of the protection afforded it by an association of East Anglian bird lovers; but at a famous old haunt on the latter it is gradually dwindling in numbers year by year, through increase of population and visitors to its breeding grounds. It is a great pity the species should have such a fatal aptitude for nidification on the mainland, instead of upon islands like the other members of its family, for it is a sweet little bird which we can ill afford to lose as a breeder.

The male and female show great affection for each other, and when the latter is brooding it is



LESSER TERN'S EGGS AND NEST.

(About one-quarter natural size.)

a very pretty sight to see her companion plunging into the sea for surface-swimming fry, and feeding her with it as she sits upon her eggs.

When flushed, the brooding female is not so demonstrative as the Common or Arctic species, although she will fly overhead uttering her sharp, piercing note, which sounds, as nearly as the characters of the alphabet can render it, like *pirre*.

It is by no means a difficult matter to sit and watch the bird on to her eggs by the aid of a pair of field-glasses, but walking to the exact spot and finding her treasure is another story. Although one may walk as straight towards the place as a gun-barrel, the alternating ridges of shingle or the absolute flatness of the field soon mislead one as to distance, and even when the precise place has been reached, the eggs harmonise so wonderfully with the millions of pebbles lying around them, that they are exceedingly difficult to detect by the unpractised eye.

They number two to four, and their small size and bold markings readily distinguish them from those of the other members of the Tern family.

TIT, BEARDED.

It was reported that the severe winter of 1894-5 had extirpated both the Bearded Tit and the Dartford Warbler, but luckily such is by no means the case in either instance.

Drainage and the thoughtless greed of the collector have played such havoc with the species under notice, that during the last forty years it has in the Norfolk Broad district—its headquarters,



HOME OF THE BEARDED TIT: BROAD-LAND.

and in all probability now sole breeding ground—decreased from 150 to 33 pairs, or to the alarming tune of 78 per cent., according to Mr. J. H. Gurney, who is an exceedingly careful observer, in touch with all the best bird men of East Anglia. Of course, the figures can only pretend to be approximate, and their compiler himself queries the correctness of his starting-point; but when every allowance has been made for inexactitude, there remains the irreducible fact that one of our prettiest and most interesting native birds is decreasing in numbers at such a rate, that vanishing point is likely to be reached within the next few decades. I appeal to all British ornithologists to do what they can to save it. What is the value of a few empty egg-shells in individual private cabinets, compared with the retention of such a splendid breeding species to the nation?

During the early part of June, 1898, my brother and I spent several days in making photographic studies of the bird and learning something of its habits and domestic economy. Although late for such an early-breeding species, we succeeded in finding a nest containing six eggs, saw two broods of young ones that had only just left the nest and were being fed by their parents, and located a third lot of chicks, which we were unable to reach on account of the exceedingly awkward nature of the place where they had been hatched.

We discovered the nest figured on the opposite page more or less by accident. A Wild Duck, in leaving her own treasure-house in a hurry, frightened a male Bearded Tit off a nest upon which he happened to be doing duty at the time, and by the exercise of a little patience I watched him



BEARDED TIT'S NEST AND EGGS.

(About one-quarter natural size.)

back to it, and noted the exact situation. It was placed practically upon the ground, in a tussock of coarse herbage. The exterior consisted of blades of sedge, and the interior was lined with fine grass and seed down. The eggs were apparently quite fresh, and taking all their characteristics into consideration, it would have been difficult to confuse them with those of any other species.

The male Bearded Tit makes a really model husband. He helps to incubate the eggs, and does his share, if not more, in feeding the chicks; and it is a genuine treat to see him hanging upside down, carefully examining the water-level of a reed stem for insects, or swinging to and fro in the wind, with his legs wide apart and his feet firmly grasping two divergent reeds.

The first two things that strike the observer are the unlikeness of the bird in every respect to the Tit family, and the suitableness of its local name of Reed Pheasant.

TIT, COLE.

THE Cole Tit is one of our commonest birds, although not such a garden-loving, suet-grubbing creature in the winter time as its congeners the Great and Blue Tits.

In some districts, both in England and Scotland, I have found it breeding in greater numbers than even the Blue Tit. It makes its nest in holes in old walls and decayed trees, often within a few inches of the ground; and even in the tunnels of rats, voles, and mice, it is said, although I never



COLE TIT VISITING YOUNG.
(About one-third natural size.)



COLE TIT'S NEST AND EGGS.
(About one-third natural size.)

had the good fortune to find one in the latter kind of situation myself.

The exterior of the nest is made of moss, which is often used in liberal quantities where the cavity to be filled up is large, and the interior of the same material mixed with hair, wool, rabbits' down, and feathers, which are, however, sometimes quite absent.

The eggs number from five to ten. In the case of the nest figured in our first illustration, there were eight, and three of these were lying directly beneath the rest in such a way as to make one wonder how they all received an equal degree of warmth from the body of the brooding parent bird. Those lying at the bottom were so deeply embedded in the foundations of the structure as to suggest that no daily or other periodic turning over took place. The nest was situated behind two easily removed loose stones adjoining the wooden post of an occupied labourer's cottage doorway.

There is no certain way of distinguishing this Tit's eggs from those laid by other members of its family, except the seeing and recognising of the bird itself. If this be done there can be no possible mistake, for it is only likely to be confused with the Marsh Tit, which has no white mark on the back of its head, as shown in our second picture, illustrating a Cole Tit going to its nesting hole with food.

Both parent birds feed their young, and are, like all their congeners breeding in our islands, most assiduous in their attentions to them.

TIT, CRESTED.

TOWARDS the end of last spring I was staying near to Spean Bridge, intending, when I had finished my work in that particular part of the country, to descend the valley of the Spey in search of Crested Tits at home.

As the country around me seemed to contain all the essential elements of the bird's habitat, and was moreover not far away from the district I had always been led to understand formed its headquarters, I began to look for it and make some inquiries. As a result I was shown two favourite nesting sites of the species within a mile of each other, by a local naturalist. One of these was in a cast-iron gate-post, to which the bird gained access by means of an open bolt-hole, and the other in the hollow tree figured in our illustration. The entrance hole was situated just above the line of the third wire from the top in the deer forest fence behind the tree, and rather nearer the left than the right hand side of the trunk. It had been tenanted six or seven years in succession; and I much regretted arriving just after the young ones had become fully fledged, and were flying about amongst the neighbouring tree tops with their parents, whose notes I at once detected as belonging to some bird I had never had the pleasure of hearing before. Owing to the foliage, and their trick of keeping to the highest parts of the trees, it was no easy matter to get a good view of the adult birds through my field-glasses.

In different parts of the forest I saw several families of Long-Tailed, Cole, and Blue Tits.

It is said that the Crested Tit sometimes digs

a nesting hole for itself in the standing stumps of wind-snapped pine trees. This may be the case in large forests consisting only of one kind of timber; but I do not think it can often be done in forests of mixed trees, for during my researches I came across scores and scores of eligible sites in hollow trunks and branches.

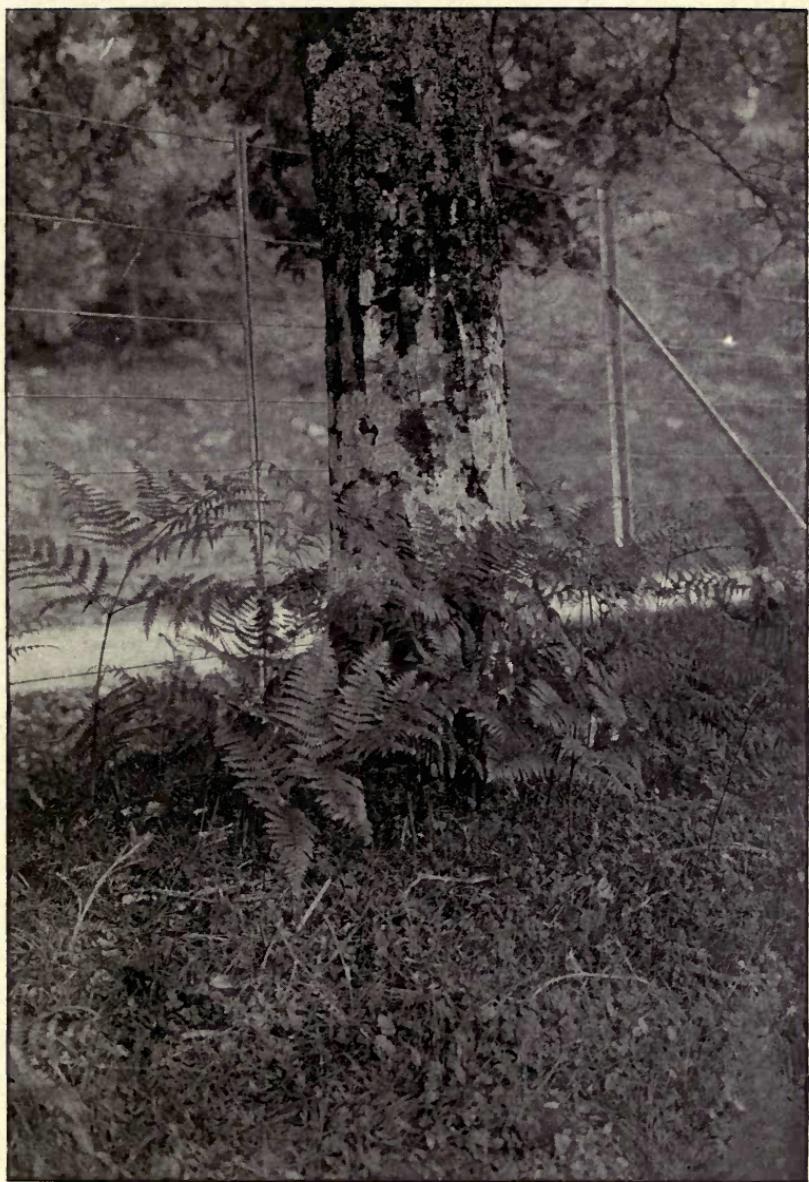
The nesting materials and eggs do not differ very widely from those of some of the other members of the Tit family, but the appearance of the parent birds is a very effective safeguard against any mistake in identification.

TIT, MARSH.

WERE it not a well-established fact that the relative positions of different species of birds in regard to numbers are constantly undergoing a change from one cause or another, it would be difficult to believe that the Marsh Tit was, as recently as Colonel Montagu's time, commoner than its relative the Cole Tit in this country.

It is, like all the other members of its family, a very busy, bustling bird, flying quickly from tree to tree, examining crack and crevice in quest of insects, which its keen eyes seldom fail to detect.

It makes its nest in holes in trees, walls, gate-posts, and banks, it is said; but all those I have found have been in the first-named kind of situation, and generally near the ground. The structure is composed of moss, bits of fine dead grass, wool, rabbits' down, and feathers, felted together and used in varying quantities, according



CRESTED TIT'S NESTING SITE.

to the accommodation afforded by the character of the hole adopted and facilities of supply.

My brother and I spent a whole day photographing the pair figured in the accompanying illustration, which was obtained in a small Hertfordshire copse. The nest was situated about six inches down the hole, showing immediately beneath the head of the bird on the left, and contained six or seven young ones, which we saved from destruction at the hands of a number of brutally cruel boys, who were prodding them with sticks one day when we arrived upon the scene.

When the camera was fixed up near the stump the parent birds were shyer than either the Great, Blue, or Cole Tits; and a peculiar thing about their behaviour was that, although they often went in opposite directions to search for the small green caterpillars with which they were feeding their chicks, upon returning they always waited and called for each other from neighbouring tree-tops before approaching the nest.

During the afternoon one of the parent birds covered the young for a while, and when an attempt was made to dislodge her, hissed with great fury.

Like the Cole Tit, when forcibly kept from entering the nesting-hole with food for the young, the parent birds will sit on some branch close by and quiver their slightly-drooped wings, just as fledglings of many species will do when about to receive a supply of food.

The eggs number from five to ten, and are so much like those of several other members of the family, that a sight of one of the parent birds is an absolute necessity of proper identification.



MARSH TIT AND NESTING SITE

(About one-fifth natural size.)

WAGTAIL, YELLOW.

I THINK of all the spring scenes that dwell in my memory, none are sweeter than the arrival of the Yellow Wagtail in its old breeding-haunt. When the sunshine and showers of April begin to coax forth the buttercups, and the kine are turned out to browse in the meadows of my native Yorkshire dale, down flies a gaily-dressed and cheerful little bird. He loses no time in any kind of useless preliminaries, but commences at once to run about round and between the legs of the cows, taking short fluttering excursions into the air after flies, or snatching them up from amongst the short green grass. Frequently he will walk up within a few inches of a cow's face, and hawk the insects she shakes from her ears, without being in the least frightened himself, or disconcerting the beast in the smallest degree. They understand each other, for they are old mutual friends and benefactors. The one attracts the food supply of the other, and the reduction of a pest that tickles ear, eye, and udder all day long is something to make even a mild-eyed cow grateful.

It breeds in all parts of England (except the extreme west), in Wales, the south of Scotland, and, to a limited extent, in Ireland. I have met with it most numerously in Norfolk, parts of Suffolk, and in the Yorkshire and Westmoreland dales. Although much commoner than the Grey Wagtail, its nest is, according to my experience, more difficult to find. The Yellow Wagtail is a great lover of old haunts, and often resorts to the same fields and pastures, however small, year after year. I have seen its nest, containing both eggs and young, mown out many times in July, and



YELLOW WAGTAIL'S NEST AND EGGS.

(About one-quarter natural size.)

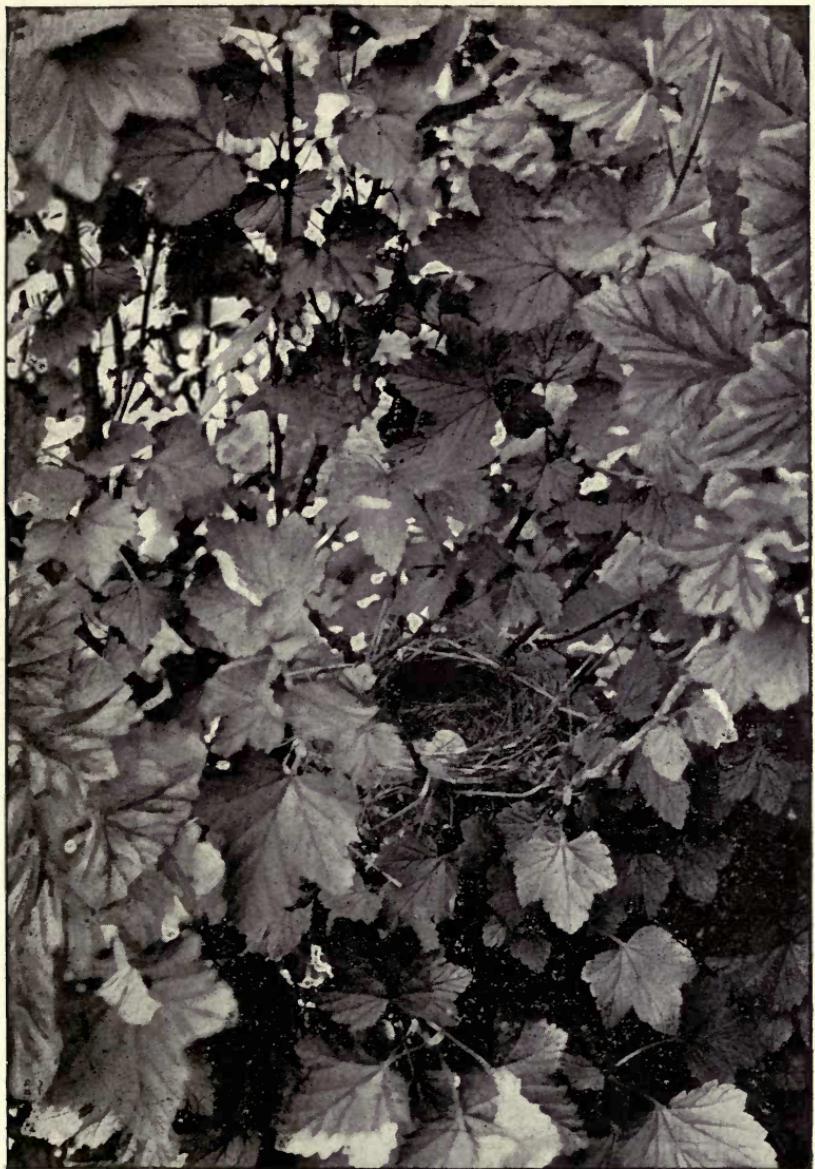
there can be but little doubt that the birds were engaged with second broods. I have found the nest on the side of a steep bank with a sod hanging partly over it, under a tussock of coarse marsh grass, and amongst heather on a common. It is composed of dead grass, moss, and rootlets, with a lining of horse- or cow-hair, down, or feathers, according to whichever can be most easily procured. Most of the nests I have examined have been lined with cow-hair which had been rubbed off against posts and stone walls.

The eggs, numbering from four to six, are greyish-white in ground colour, spotted and mottled with brown of various shades. They are sometimes marked with blackish-brown streaks at the larger end. Considering the situation in which they are laid, they can hardly be mistaken for those of any other species except the Blue-headed Wagtail, the nest and eggs of which have very rarely been met with in this country.

WARBLER, GARDEN.

THE Garden Warbler is a bird that loves to hide itself amongst the thick foliage of our copses and shrubberies, and in consequence is no doubt often overlooked, in spite of its long-continued and varied notes, which are uttered when all the other members of its family are in full blast. It breeds in nearly all suitable parts of England, the south of Scotland, Ireland, and in one or two counties of Wales, and is described as even abundant in some districts, such as that of north Lincolnshire.

Our illustration was secured in the kitchen



GARDEN WARBLER'S NEST AND EGGS.

(About one-fifth natural size.)

garden of that little Midland paradise of birds, Rainsworth Lodge, where our friend Mr. J. Whitaker cares, winter and summer alike, for all and sundry feathered visitors.

The Garden Warbler's nest is generally placed not far from the ground, in gooseberry, black or red currant bushes, briars, brambles, nettles, thorn-bushes, and even amongst peas and their supporting sticks, in gardens, woods, shrubberies, orchards, and hedgerows growing by streams. It is a rather flimsy structure, made of dead grass stems and blades, fibrous roots, and sometimes a little moss or wool, and lined with rootlets and a little horse-hair.

The eggs number from four to six, of varying ground colour, from white to greenish-white or yellowish stone-grey, spotted, blotched and clouded with varying shades of brown, deep olive, and ash-grey under-markings. The spots and blotches sometimes predominate at the larger end. Occasionally specimens are marbled with brown. They are so much like those of the Blackcap, that I have been quite unable to pick them out when mixed up. However, the chestnut cap of the female of the latter species will always help to identify a nest with certainty.

WARBLER, GRASSHOPPER.

AN essential to the well-being of the Grasshopper Warbler is plenty of cover in which to hide and skulk, mouse-like, from observation. It does not seem to matter in the least whether it be the growth of wet or dry land, so long as sufficient density prevails. However, I must admit that I



GRASSHOPPER WARBLER'S NEST AND EGGS.

(About one-fourth natural size.)

have met with it most numerously on the Norfolk Broads, where its peculiar reeling notes may be heard to the greatest perfection in the dusk of a still summer's evening. Although bearing a strong resemblance to the chirruping of a grasshopper, there is something, apart from their greater duration, much more solid and machine-like, and once heard, the merest tyro is not likely to mistake them for the sounds produced by any orthopterous insect. Like many other unseen birds, its precise position is difficult to locate by the sound of its notes, because of the ventriloquial effect caused by the movements of its head whilst in the act of emitting them.

The Grasshopper Warbler breeds in most suitable parts of England and Wales, some portions of Scotland, and in Ireland, where our illustration was secured, not far from Lismore. I have met with it breeding close to London, and although nowhere very common, it is still fairly numerous.

Its nest is built on or near the ground, amongst thick coarse grass, under furze and similar small bushes, on the sides of hedgebanks, in fens, woods, commons, and thickets, where there is an abundance of under-cover in which it can hide or slip off and away without being observed. It is made of dead grass and moss, with an inner lining of fine dry stalks, and is deep, and difficult to find.

The eggs number from four to seven, of a pale rosy-white ground colour, and are very liberally speckled and spotted with reddish-brown. These markings are most profuse at the larger end, where occasionally a few fine streaks may be found. Although it is hard to get a sight of the parent birds, the eggs present little difficulty

in the way of identification, and are not likely to be mistaken for those of any other British bird.

WARBLER, REED.

THE Reed-Warbler is by no means a rare bird, and may be heard late most summer evenings rattling off its loud and hurriedly-delivered notes on the banks of sluggish rivers, canals, reservoirs, meres, and broads, particularly in the eastern and midland portions of England. It certainly breeds as far north as Yorkshire, where I have seen its nest, and is said to do so sparingly on the banks of the Tyne and in Cumberland. In Wales it is rare.

Its nest is as a rule beautifully constructed, and suspended between the stems of three or four reeds at varying heights above the surface of the water. Occasionally it may be found attached to the slender branches of willows and other trees growing close to water. The bird appears to make two distinct types of nest. I have seen some with such a deep foundation that they looked like an inverted cone, and others where this was entirely dispensed with, as in the case of our illustration, which was secured on the shores of the Cam not far from Cambridge.

The nest is composed of long blades of dead grass, leaves of reeds, roots, and wool, with an interior lining of fine grass and hair. It is, as necessitated by its situation, very deep, so that when the reeds to which it is attached are violently swayed to and fro by strong winds, the eggs do not roll out. The bird is often victimised by the Cuckoo.

The eggs, numbering four or five, vary in ground colour from pale greenish-blue to dull greenish-white, and are blotched and blurred with darker greyish-green and light brown. Some specimens are marked with black or dark-brown streaks and spots. The situation of the nest, its characteristics of construction, and the noisy behaviour of its owners serve to identify the eggs.

WARBLER, WOOD.

THIS little migrant breeds sparingly in nearly all suitable parts of England, and I should say even fairly plentifully in some parts of Wales, from the number of birds I have heard and seen in some of the more out-of-the-way woods of the Principality. It also nidifies in Scotland, but is said to be rare in Ireland. It is distinguished from its congener the Willow Warbler by its greater length of wing, a broader yellow band over the eye and ear coverts, the purer green of its upper and lighter tint of its under parts.

The loud song-notes of the male, although difficult to represent by the characters of the alphabet, are easily distinguished when once they have become familiar to the ear of the listener.

The species is partial to woods with a plentiful supply of tall trees. Whilst sitting in a little well-timbered Westmoreland ghyll a few springs ago, watching a pair of Blue Tits and a Spotted Flycatcher feed their young, I saw a Wood Warbler drop into some tall grass growing on a steep bank, several times over, and when I went to the spot found a nest full of feathered young ones. A little



REED WARBLER'S NEST.

(About one-fourth natural size.)

later in the day my brother came along and photographed it, with one of the chicks sitting in the entrance hole anxiously waiting for its mother to return with a supply of insects.

The nest is placed on the ground amongst thick grass, dead bracken, and other herbage in woods, old plantations, and other places where timber is plentiful, and is composed of moss, leaves, and dead grass, lined with fine grass and horse-hair. It is dome-shaped like that of the Willow Warbler and Chiffchaff, and may generally be distinguished from them by the fact that it is not lined with feathers, although some instances have recently been recorded of this being done by the Wood Warbler.

The eggs number from five to seven, but more generally a clutch consists of six, the ground colour of which is white, speckled and spotted all over with dark purplish-brown and ash-grey. The spots are generally most numerous at the larger end. They are not likely to be confused with those of any other species breeding in a similar situation, especially when the appearance of the bird and the lining of the nest are taken into consideration.

WATER RAIL.

THE shy, skulking habits of the Water Rail no doubt make it appear to be a much rarer bird than it really is, but from the small number of nests found in this country it cannot, I fear, as some naturalists assert, be abundant as a breeding species even in the most favoured localities. I saw a nest at Potter Heigham in Norfolk last year, and my brother saw



WOOD WARBLER'S NEST AND YOUNG.

(About one-third natural size.)

and photographed another this year in the same neighbourhood, and those were the only two we heard of in the district, although the keen-eyed marshmen keep a sharp look-out for such objects of interest.

I met with a pair inhabiting a reed-grown ditch running round a small garden in North Uist last summer, and have no doubt whatever that they had their nest there, although I was unable to find it. When discovered in the open, the bird's quick sight and compressed form enable it to dart away into the reeds and be gone without appearing to stir a blade of anything.

Whilst out on the Norfolk Broads late in the evening, on several occasions I have heard its soft *whit*-like note, which at once strikes the ornithologist as something strange and new to him on hearing it for the first time.

The nest figured in our illustration was photographed not far from Lismore, in Ireland. It was situated amongst coarse grass and other herbage growing in a bog, in which the photographer stood up to his knees. Those we have seen in Norfolk were both on floating reed beds. The structure is large for the size of the bird, and usually composed of reeds, sedge grass, and flags.

The eggs number from five to eleven, but a clutch generally consists of six or seven. They are creamy white marked with small reddish and ash-grey spots, the latter of which are underlying. The eggs of young birds laying for the first year are smaller than those of older members, but there is not much fear of their being confused with those of any other species breeding in the same kind of situation.



WATER RAIL'S NEST AND EGGS.

(About one-fifth natural size.)

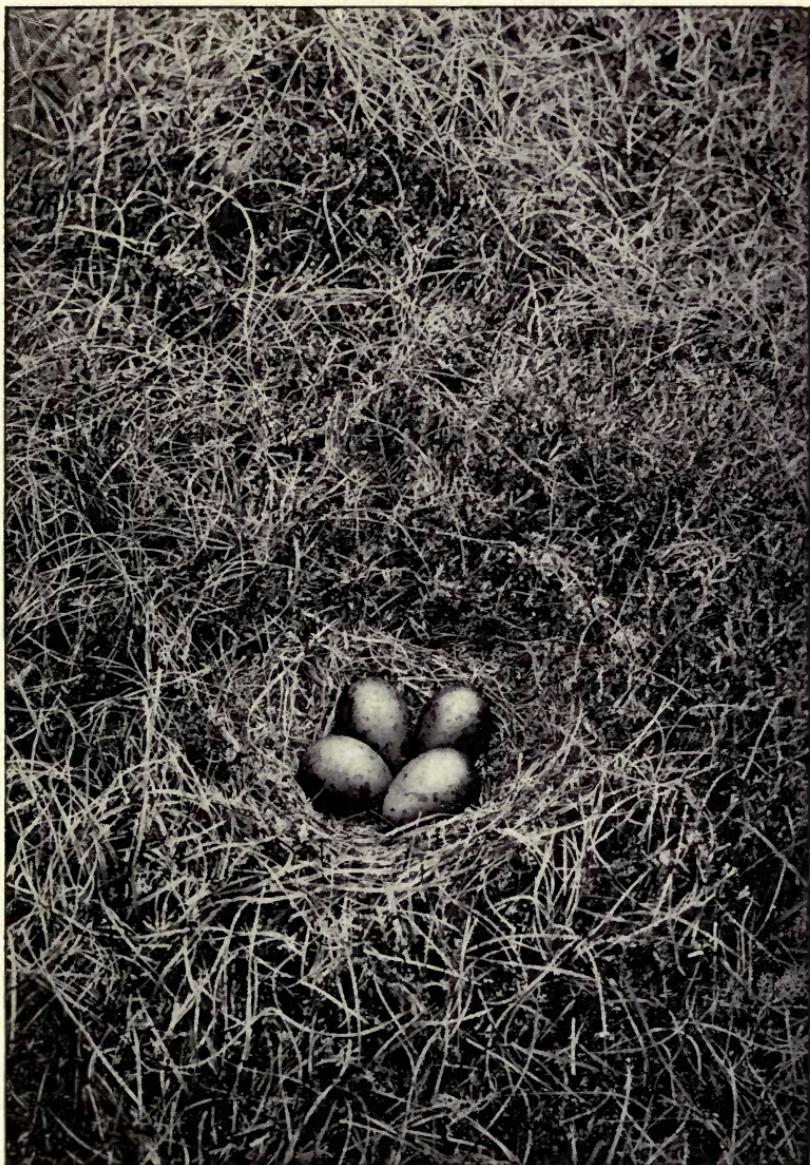
WHIMBREL.

I AM sorry to say that I harbour a grave suspicion that this bird neither breeds so plentifully, nor in so many parts of the north of Britain, as it is supposed to do by many naturalists. Being a migrant, its numbers no doubt vary considerably from season to season, and I wish I could say so much for its enemies in certain quarters.

Mr. J. R. Gunn, of Kirkwall, tells me that it is "by no means plentiful" in the Orkneys. I have met with it in the Outer Hebrides, and at St. Kilda in the middle of June, but under circumstances which left no doubt whatever that it was not there on breeding intent.

In the summer of 1898 my brother and I visited an island in the Shetlands which is considered, I believe, to be the ancient stronghold of the members of the species breeding in this country. Although we certainly saw two or three pairs of birds, we had no reason to suppose any of them had eggs from their behaviour, with a single exception; and after a considerable amount of trouble we succeeded in finding and photographing theirs, which are figured on the opposite page. We were told that a number of pairs breed on the mainland, but if such is really the case, I am truly sorry for their chances of taking any young off, considering the vigilance of the lynx-eyed egg-eating natives, of whose collecting capacity I had some proof.

The Whimbrel, although in general appearance similar to the Common Curlew, is considerably smaller, and its note varies sufficiently to at once arrest the ear of the practised ornithologist. The nest is very similar to that of its congener



WHIMBREL'S NEST AND EGGS.

(About one-fifth natural size.)

both in regard to situation (amongst short heather and bent grass) and the lining of it with a few blades of dead grass.

The four pear-shaped eggs vary from olive green to olive brown in ground colour, and are spotted and blotched with brown of different shades and light grey. They are not likely to be confused with those of the Common Curlew on account of their smaller size, but may possibly be taken for those of the less pear-shaped Richardson's Skua, as the birds breed on the same ground. Watching the Whimbrel on to her nest through a good pair of binoculars is the best way both to find and identify her eggs.

WOODPECKER, GREEN.

THE Green Woodpecker is the most numerous member of the Picidæ family living in this country, and appears to confine its breeding area to England and Wales. Its loud *yaffa, yaffa, yaffle* note may often be heard close to London, where I have sat and watched the bird alternately hunting the bark of trees for insects, and hopping about on the ground below in search of ants.

It is essentially a lover of well-wooded districts, although I have met with it nesting by a roadside where there were very few trees in the immediate neighbourhood, and Dixon mentions finding a pair occupying a hole in the tiny cliffs between Torquay and Paignton, where in all conscience they might have found abundance of suitable timber.

Some of the older observers speak of the



GREEN WOODPECKER'S NESTING HOLE.

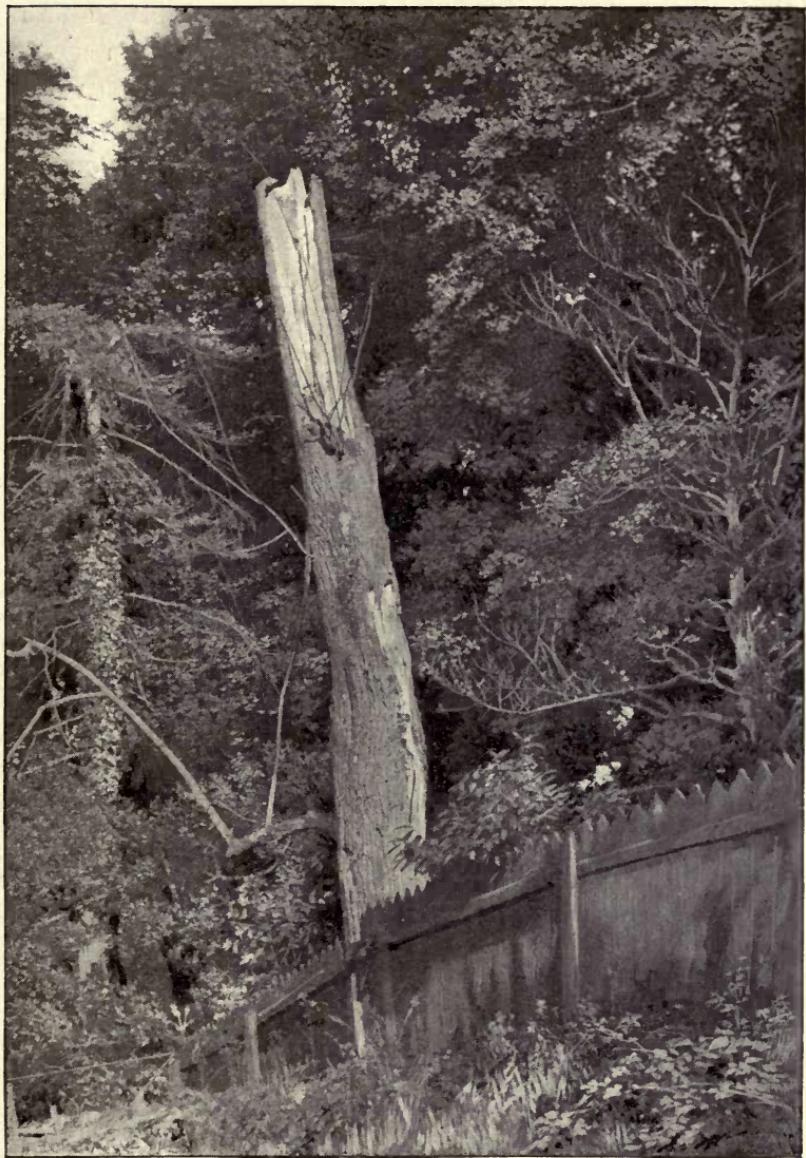
species occupying the same nesting site for as many as thirty years in succession. I have never known a hole used two seasons on end, because of the Starling's aptitude for finding and promptly lining and utilising such an excavation for its own purposes. Indeed, the legitimate owner is frequently robbed of its breeding-hole directly it has been dug; and owing to the persistent persecution undergone, it is useless to look for the eggs of the Green Woodpecker in many parts of the country until the Starling has chosen its nesting site and settled down to the serious work of nidification.

The hole in the dead tree figured in our illustration was dug and occupied by a pair of Green Woodpeckers last year, but was confiscated quite early in the spring of the present one by Starlings. It was about two and a half inches in diameter, did not go to the centre of the trunk before descending, and was about twelve inches deep.

The eggs number from five to seven or eight, are pure white, glossy and unspotted, and can hardly be mistaken for those of any other species breeding in a similar situation on account of their larger size.

WOODPECKER, LESSER SPOTTED.

THE Lesser Spotted Woodpecker, although local, is by no means a rare bird in suitable parts of England south of Yorkshire and east of Cornwall. I had a pair under observation in Surrey for some time last spring, and frequently heard and saw one of them producing its resonant hammering on

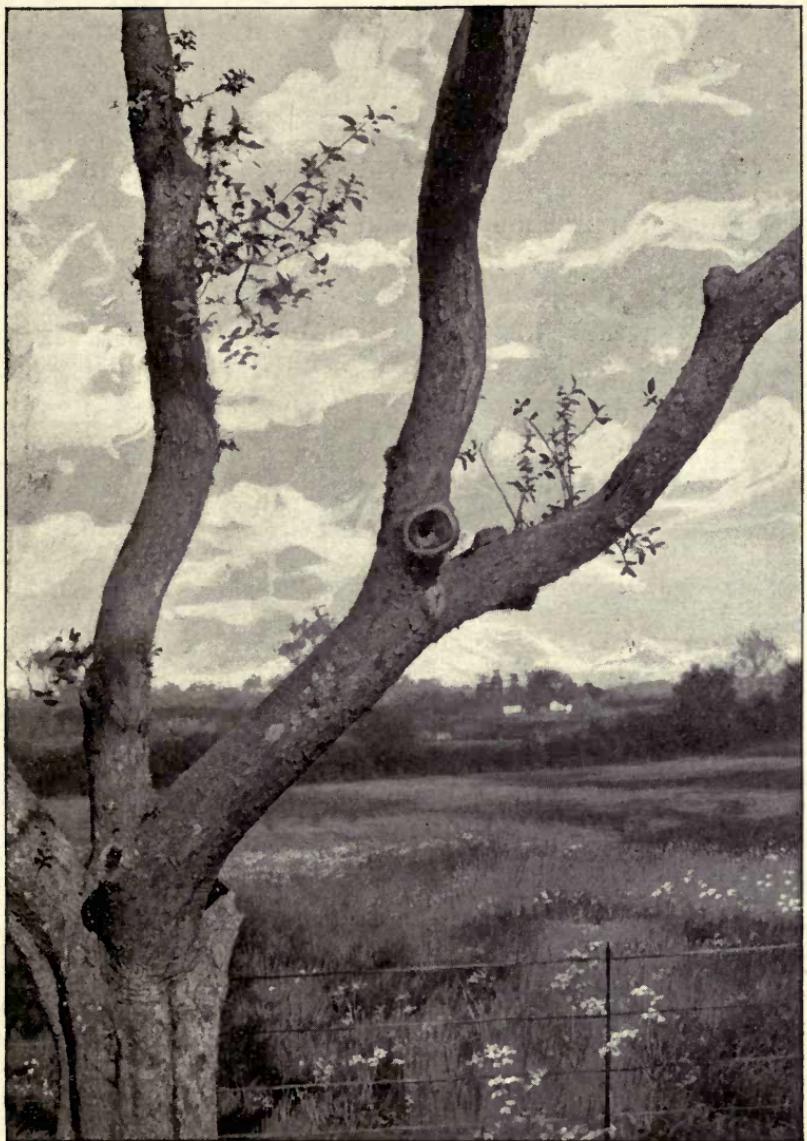


LESSER SPOTTED WOODPECKER'S NEST.

the branches of a dead oak tree. I hoped to find their nest in the neighbourhood, which is an eminently suitable one; but was balked in this, I regret to say, by a more curious than humane gunner, who slew one of them in order to have a closer inspection of the tiny creature that could make such a far-sounding noise.

The bird makes its nesting-hole in the trunk or branch of a tree, and often selects for the purpose such as grow in orchards. It is small in diameter, and varies from six or seven to twelve or fourteen inches in depth, and the eggs are deposited on the dust and *débris* at the bottom of the rounded chamber prepared for their reception. Our illustration was secured near to Torquay. The broken trunk is that of a dead lime, and the tiny entrance hole to the Woodpecker's nesting-shaft is immediately beneath the first branches from the top and in front. The birds dug it out, and reared a brood therein last year, and returned with the evident intention of doing so again this, but were ousted by a pair of House-Sparrows. These reared a brood in the hole during the early spring, and were busy feeding a second at the time the photograph was taken. In going in and out I noticed that they had to undergo a considerable squeeze on account of the smallness of the hole.

The eggs of the Lesser Spotted Woodpecker number from five or six to as many as nine, are white and glossy, and only distinguished with certainty from those of the Wryneck by their smaller size and the appearance of their owner.



WRYNECK'S NESTING SITE.

WRYNECK.

THIS sober-coloured, but nevertheless beautiful migrant is fairly plentiful, and breeds most numerously in the south and east of England. Although not much seen, its presence is always easily detected by its loud Kestrel-like note, which is uttered about nine times in quick succession, and never fails to arrest the attention of the bird student.

I have met with it in Norfolk, Suffolk, Sussex, and Surrey. Our illustration was obtained in the first-named county.

Whilst near to Lewes last spring, a gardener told me he knew of a hollow tree in which a Wryneck was *building* her nest, as he had actually seen her taking materials in. This was so interesting that I got him to take me to the place at once, and when we arrived there, sure enough the bird flew out. The hole was about six feet high, and ran down into an open crack several inches wide. This was filled with newly gathered moss. I saw the bird alight upon the ground in a park hard by, and watched for a long time to see whether she would bring any more moss, but she did not return whilst I was there. Upon visiting the same place a few days later I put a slender twig down the hole, but could feel nothing but soft yielding moss. The bird, however, laid in the hole and succeeded in rearing a brood.

The Wryneck generally adopts the deserted nesting-hole of a Woodpecker, if it has not already been usurped by some other species, and is not averse to it even after it has been lined with moss, wool, and feathers, and used by a Great Tit.

When molested on the nest the bird hisses like a snake, and works her head round in a manner curiously suggestive of a reptile.

The eggs number from six to ten, and are pure white and unspotted, a trifle larger than those of the Lesser Spotted Woodpecker, but require the most careful identification.



YOUNG TAWNY OWL.

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